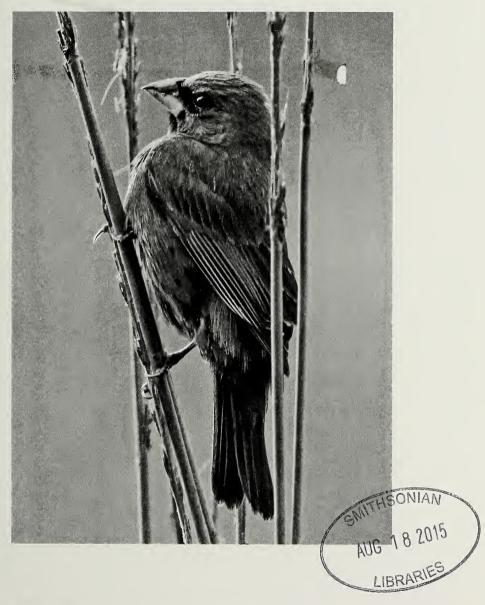
# The Chat

No. 2





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### THE CHAT

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#### **Articles**

Monthly Abundance and Seasonal Spatial Distribution of Shorebirds in Cape Romain National Seasonal Spatial Distribution of Shorebirds in Cape Romain National Seasonal Spatial Distribution of Shorebirds in Cape Romain National Seasonal Spatial Distribution of Shorebirds in Cape Romain National Seasonal Spatial Distribution of Shorebirds in Cape Romain National Seasonal Spatial Distribution of Shorebirds in Cape Romain National Seasonal Spatial Distribution of Shorebirds in Cape Romain National Seasonal Seasona
Wildlife Refuge, South Carolina Nicholas J. Wallover, Mary-Catherine Martin, and Felicia J
Sanders. 60

#### Fifty Years Ago in The Chat

-		-	_
Luna	965	1/1	
June	7().)	. / :	,

#### Reports

2014 Fall Rird Counts in South (	Carolina Stavan I	Wagner	20

#### Briefs for the Files

Winter 2014-2015 Josh Southern	87

# Monthly Abundance and Seasonal Spatial Distribution of Shorebirds in Cape Romain National Wildlife Refuge, South Carolina

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#### Introduction

Shorebirds are declining globally, including in the western hemisphere (Brown 2001, Morrison et al. 2001, Morrison et al. 2006, Bart et al. 2007, Andres 2009). Knowing shorebird numbers and trends is essential to identifying high priority species, identifying important conservation areas, and designing management programs (Brown et al. 2001). However, there is a paucity of shorebird abundance data, which is an obstacle to prioritizing conservation efforts (Brown et al. 2001, Andres 2009, Clay et al. 2010). Specifically, more information is needed on shorebird numbers at staging, migration, and wintering areas. At these nonbreeding sites shorebirds gather in dense groups during high tides, which provide easier surveying opportunity and thus more accurate population estimates than breeding surveys (Howe 1989).

Repeated surveys of shorebirds at nonbreeding sites also provide temporal and spatial data which can be used to identify habitat characteristics of roost sites such as proximity to foraging grounds and predation risks (Catlin et al. 2005, Rogers et al. 2006). These data can also guide management and restoration of habitats for the shorebird assemblage or for individual high priority species (Weber and Haig 1996, Farmer and Parent 1997, Saalfeld et al. 2011, Meager et al. 2012). For example, changes in distribution over time may indicate a change in habitat that warrants attention from managers (Ledee et al. 2008, Muir and Colwell 2010).

Previous studies by Marsh and Wilkinson (1991) and Dodd and Spinks (2001) identified the entire Cape Romain Region, which includes the Cape Romain National Wildlife Refuge (CRNWR) and adjacent private and state properties, as an important area for migrating and wintering shorebirds. Marsh and Wilkinson (1991) found that, at the time, the Cape Romain Region had 30% of the estimated American Oystercatcher (*Haematopus palliatus*) and Marbled Godwit (*Limosa fedoa*) populations during both spring and fall migrations. In addition, the site had 15% of migrating Shortbilled Dowitcher (*Limnodromus griseus*), Dunlin (*Calidris alpina*), Willet (*Tringa semipalmata*), Whimbrel (*Numenius phaeopus*), Wilson's Plover

(*Charadrius wilsonia*), and Semipalmated Plover (*Charadrius semipalmatus*) populations, which led to the designation as a site of Hemispheric Importance in the Western Hemisphere Shorebird Reserve Network, a network of critical shorebird habitats in the Western Hemisphere (Myers et al. 1987 and Bildstein et al. 1991).

Although the importance of CRNWR has been established in previous studies, shorebird abundance for most of CRNWR has not been published since 2001, and previous studies did not include thorough surveys of the barrier island beaches. Additionally, this project is the first time high density areas have been identified, which is important to local conservation efforts.

#### Methods

#### **Study Area**

CRNWR encompasses 26,817 ha along 35 km of the South Carolina coast, centered at (33° 00' N, 79° 30' W). It is bordered by but does not include the Atlantic Intracoastal Waterway (AICW) to the west, and to the north and south by undeveloped islands managed by the South Carolina Department of Natural Resources (Fig. 1). CRNWR is composed of 75% tidal wetlands dominated by Smooth Cordgrass (*Spartina alterniflora*, USFWS 2010). These wetlands have numerous shallow bays and creeks, with Eastern Oyster (*Crassostrea virginica*) reefs. The majority of these creeks empty into Bulls Bay and Cape Romain Harbor.

Bulls Bay is a shallow, sandy and muddy expanse which opens directly to the Atlantic Ocean. The bay is fringed in many areas adjacent to marsh by shell rakes, exposed deposits of washed oyster shells. Bulls Bay contains two main land masses, White Banks, a collection of three shell rake islands, and Marsh Island, a small horseshoe shaped beach with interior marsh. Cape Romain Harbor, also has fringing oyster rakes along marsh edges, and is protected from the ocean by two long, sandy islands: Cape and Lighthouse Islands. South of Lighthouse Island and north of Bulls Bay is Raccoon Key, which is currently cut by two small creeks. A small island Sandy Point, which was once the southern tip of Raccoon Key, was isolated from Raccoon Key by Five Fathom Creek. To the south of Bulls Bay, Bulls Island extends to the southern boundary of CRNWR Refuge at Price Inlet, and is the largest island in CRNWR. Although Bulls Island has 12 km of beach, the majority of the shoreline has eroded into the maritime forest, leaving standing oak, cedar, pines and palms on the beach, preventing shorebird roosting except on the ends of the island.

Survey sites included all habitat described above but did not include all shorebird roosting sites in CRNWR. Some shell rakes along bays and creeks and most of Bulls Island, including ideal roosting habitat on the north end

and all of the south end, were not included. Only the north tip of Bulls Island was surveyed. Larger islands were divided into regions. Raccoon Key was divided into three sites: south, middle, and north. These were delineated at 33° 00′ 59" N, 79° 25′ 21" W and 33° 00′ 44" N, 79° 27′ 33"W. Sandy Point was delineated from Raccoon Key at 33° 00′ 27" N, 79° 28′ 23" W. Lighthouse Island was divided into four sites: south, a washover area, middle, and north. These were delineated at 33° 00′ 28" N, 79° 24′ 57" W, 33° 00′ 27" N, 79° 24′ 37" W and 33° 00′ 33" N, 79° 22′ 18" W. Cape Island was divided into three sites: south, middle, and north. These were separated at 33° 01′ 00" N, 79° 21′ 35" W and 33° 04′ 11" N, 79° 20′ 09" W.

#### Censuses

Monthly censuses of all shorebirds were completed by a single observer, Mary-Catherine Martin, between November 2007 and October 2010 along the islands and bays of CRNWR (Fig. 1). Because of the extent of the survey area, censuses were completed over 3 consecutive days coinciding with spring high tides (see Marsh and Wilkinson 1991 for additional methods). All censuses were completed within 2 hours before and after high tide when birds were concentrated in roosting areas and less likely to be foraging (Prater 1981). Censuses of Cape and Lighthouse Islands were done from an ATV and by walking. Raccoon Key, Marsh Island, White Banks, and north end of Bulls Island were done by walking and all other areas were censused from a boat. Shorebirds were observed and counted ahead of the observer using a spotting scope unless the survey was from a boat when binoculars were used. Attempts were made not to recount flushed birds. It was assumed that birds were not recounted on consecutive days within the same month. A handheld GPS unit was used to record locations of all shorebirds.

#### Data analysis

Data collected in surveys were used to determine monthly abundance and seasonal spatial distribution for the most abundant species and Wilson's Plover and Piping Plover (*Charadrius melodus*), which are high priority species. Seasonal spatial analysis was completed using the Kernel Density Estimation (KDE) tool in ArcGIS version 9.3 (ERSI, Redlands, California). The KDE tool was used to determine seasonal hotspots, or where highest shorebird densities occurred during spring migration (March through July), fall migration (August through October) and winter (November through February) for each year and for all years combined. All search radii were set to 600m, and density outputs were set as individuals per square km. For each dataset KDE 1° and 2° hotspots were identified if the location had a density value in the top 20th % or 40th to 21st % respectively. To assess seasonal

distribution across years, 3 KDE outputs for each of the 3 seasons (years 1, 2 and 3) were normalized and summed using raster math available in ArcGIS version 9.3 (ERSI, Redlands, California). Each input season was reclassified into 10 equal interval categories within each dataset; each category was then scored 10 through 1in descending order. Summing the 3 KDE outputs for each season required a 2 step application of the Plus tool available in the Spatial Analyst Extension of ArcGIS 9.3.

#### Results

A total of 109 surveys were conducted and 216,418 shorebirds and 23 species were counted. The highest yearly total shorebird count was 93,177 during year 3 from November 2009 to October 2010 (Table 1). February had the most shorebirds (Fig. 2) with the highest monthly count in February 2009 of 18,262 birds (Table 2).

For each of the 9 survey seasons, between 1 and 3 locations were identified as 1° hotspots for the total shorebird assemblage (Tables 3-5). South Raccoon Key was a 1° hotspot for the total assemblage for 2 fall and spring seasons, and 1 winter season.

Dunlin was the most abundant species comprising 52.0% of yearly total counts (Table 1), and a maximum monthly count in February 2009 of 15,842 (Table 2). Dunlin were absent from CRNWR from June to September (Fig 2). South Raccoon Key was the only 1° hotspot for Dunlin during all spring seasons; 1° hotspots in fall and winter seasons were different each year (Tables 3-5). Short-billed Dowitcher was the second most observed species, accounting for 9.0% of total shorebird abundance. The highest density of Dowitchers were observed during winter seasons at Middle Raccoon Key each year, with additional 1° hotspots at North Bulls Island and the Washover area of Lighthouse Island during winters 1 and 3 respectively (Table 5). Spring and fall densities were highest at Marsh Island (Tables 3 and 4). American Oystercatcher was the third most common species and averaged 5233 per year (Table 1), the peak monthly abundance of 776 was in September of year 3 (Table 2). Mean highest counts were in September and lowest in July (Fig. 2). Densities were highest each season on 1 or more White Banks islands, additional 1° hotspots included South Lighthouse Island during winter seasons, and Marsh Island in spring (Tables 3-5).

Red Knots (*Calidris canutus*) were the nineth most common species observed and the highest counts occurred during May and August (Fig. 3). The peak count of 1185 individuals was observed in August of year 2, with a high spring migration count of 1156 occurring in May of year 3 (Fig. 2). The highest density for spring was observed at Marsh Island and fall at South Raccoon Key and (Tables 3 and 4).

#### Discussion

In South Carolina, no monthly shorebird censuses have been published from areas outside of the Cape Romain Region and few in adjacent states. Surveys of the North Carolina Outer Banks found Sanderling (Calidris alba), Red Knot, and Willet to be the most abundant species, with no species overwintering in large numbers (Dinsmore 1998). It is difficult to compare this study to other surveys in the Cape Romain Region because the survey area was different. Cubie et al. (2012) focused on the impoundments on Bulls Island and the beach front on the north end of Bulls Island. Marsh and Wilkinson (1991) and Dodd and Spinks (2001) surveyed limited beachfront, and included areas outside CRNWR, including the adjacent AICW. The AICW is an important shorebird roosting site. For example, Dodd and Spinks (2001 unpublished data) found similar numbers of shorebirds on the AICW as were on beachfronts; as many as 20,000 shorebirds on the AICW in Cape Romain Region in the winter. Sanders et al. (2004) and Brown et al. (2005) found approximately 2000 oystercatchers in the Cape Romain Region, of which 1400 were on the AICW. High tide surveys of CRNWR under represent shorebird use of CRNWR because many shorebirds roosting on the AICW forage in CRNWR (Hand 2010). If possible the AICW adjacent to CRNWR should be surveyed for a more thorough understanding of shorebird use of the area and for better comparisons with previous studies.

Dunlin accounted for over half of all shorebirds counted with a peak count of nearly 16,000, representing 7% of the estimated population of C. a. hudsonia of 225,000 (Morrison et al. 2006). Similarly Dunlin was the most abundant species in other studies in Cape Romain Region (Marsh and Wilkinson 1991, Dodd and Spinks 2001, Cubie et al. 2012). Wetlands in the Southern Atlantic Coast have substantial wintering numbers, however there is a lack of published data (Fernandez et al. 2010). Fernandez et al. (2010) examined International Shorebird Survey data and identified only 3 locations which had over 2000 wintering Dunlin in the United States. Only Laguna Madre, along the Texas/Mexico border had more wintering birds (52,000) than this study (Fernandez et al. 2010). Although not included in Fernandez et al. (2010), Georgia Midwinter Waterbird Surveys conducted in mid-January in 1999, 2002, 2004 and 2005 found flocks of nearly 6,000 birds distributed across the state's barrier islands, with statewide counts as high as 32,016 in 2002, 26,455 in 2004, and 16,051 in 2005 (Georgia Department of Natural Resources 2005). In the 1990s, Dinsmore et al. (1998) reported few Dunlin on the Outer Banks of North Carolina during migration and wintering months, with a high count of only 196 in November. The Florida Game and Freshwater Fish Commission estimated less than 7,000 Dunlin wintering in the state (Sprandel et al. 2000, Sprandel et al. 1997). Although widespread surveys are needed to understand wintering Dunlin distribution, it appears South Carolina and Georgia are more important than other states in the Southeast United States.

Little is known about the status of many North American shorebirds and for those species which trend data is available, 88% are declining (Andres 2009, Brown et al. 2001). Seven of the ten most abundance species observed in this study are thought to be declining ((Dunlin, Short-billed Dowitcher, Western Sandpiper (Calidris mauri) Sanderling, Black-bellied Plover (Pluvialis squatarola) Red Knot, and Willet, Morrison et al. 2006)). CRNWR is also important for federally listed species and includes two critical habitat units for Piping Plover (SC-7 and SC-8) (US Fish and Wildlife Service 2001). Units include the beaches of Lighthouse Island, and North and Middle Raccoon Key, as well as the south end of Bulls Island, which was not included in these surveys. The areas identified as critical habitat and included in these surveys contained all Piping Plover hotspots identified in this study, with the exception of an additional 1° hotspot site at north Bulls Island during spring years one and two. This area had 37% (13) of Piping Plovers seen during those two seasons combined and should be included in future critical habitat designation. The population of the Red Knot subspecies C. c. rufa is estimated to be 20,000 and was listed as a threatened species on December 5, 2014 (US Fish and Wildlife Service 2014). Although low numbers winter in CRNWR, the Refuge is used by Red Knots on south and north bound migrations.

Shorebird numbers in this study may under represent the number of migrating birds which utilize the CRNWR as a stopover area. Residency times at stopover sites may be less than 30 days for individuals and flocks (Battley et al. 2005). Lyons and Haig (1995) found most Semipalmated Sandpipers (*Calidris pusilla*) stayed less than 11 days in South Carolina. Western Sandpipers at stopover sites along the Pacific Flyway stayed less than 10 days (Warnock and Bishop 1998). Because censuses were only conducted once a month, it is likely surveys missed flocks passing through CRNWR between counts and counts represent minimum numbers within the survey area.

The kernel density estimation method identified the spatial variability of each species during each season at a resolution not previously available. In doing so, important areas were identified for individual species, such as the South Lighthouse Island which had high American oystercatcher winter density or for supporting large numbers of the entire shorebird assemblage, such as Middle Raccoon Key. This distribution information creates opportunity for species oriented seasonal management. Numerous initiatives (e.g. Brown et al. 2001, USFWS 2010) highlight the need to identify roost sites as a primary step towards conservation, followed by management actions designed to limit disturbance. The effects of boat, human and pet disturbances at roosting and foraging sites are well documented and have been found to cause increased parental vigilance, increased flushing from nests, and decreased chick survival (Burger 1991, Lafferty 2001, Rodgers and Schwikert 2002).

Management actions may include total restriction of human activities, a method currently employed at the CRNWR, or conditional restrictions, such as tide based closures as suggested by Harrington (2003) and the Cape Romain Comprehensive Conservation Plan (USFWS 2010). Sandy Point was lost in the summer of 2009 after at least 10 years of erosion. The loss of Sandy Point exemplifies the dynamic nature of the CRNWR barrier island system. This site had high numbers of Red Knots. Because coastal systems are dynamic and shorebirds may move roost sites due to environmental conditions and disturbance pressure (Peters and Otis 2007), implementing flexible closures is optimal for shorebird conservation.

Currently, there are closures at White Banks and Marsh Island from February 15 to September 15 but no protection for late fall migrant or wintering shorebirds. The need for habitat protection is increasing in the CRNWR. Recreational use of the CRNWR will increase in the coming years because Charleston, located approximately 32 km south, is projected to triple its geographic size by 2030 and expand into adjacent rural and natural areas (Allen and Lu 2003). Because of the dynamic nature of CRNWR and use by shorebirds, continuing surveys will provide useful information that can guide protection of shorebirds.

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#### Literature Cited

- Allen, J. and K. Lu. 2003. Modeling and prediction of future urban growth in the Charleston region of South Carolina: a GIS-based integrated approach. Conservation Ecology 8: 2 [online] http://www.ecologyandsociety.org/vol8/iss2/art2/.
- Andres, B. 2009. Analysis of shorebird trend datasets. [online] http://www.stateofthebirds.org/2009/home-page-documents/Analysis%20of%20 Shorebird%20Population%20Trend%20Datasets.pdf.
- Battley, P., D. Rogers, J. van Gils, T. Piersma, C. Hassell, A. Boyle and Y. Hong-Yan. 2005. How do red knots *Calidris canutus* leave Northwest Australia in May and reach the breeding grounds in June? Predictions of stopover times, fuel rates and prey quality in the Yellow Sea. Avian Biology. 36:494-500.
- Bart, J., S. Brown, B. Harrington and G. Morrison. 2007. Survey trends of

- North American shorebirds: population declines or shifting distributions? Avian Biology 38: 73-82.
- Bildstein, K. L., G. T. Bancroft, P. J. Dugan, D. H. Gordon, R. M. Erwin, E. Nol, L. X. Payne and S. E. Senner. 1991. Approaches to the conservation of coastal wetlands in the western hemisphere. Wilson Bulletin 103:218-254.
- Brown, S. C, C. Hickey, B. Harrington, and R. Gill, eds. 2001. The U.S. Shorebird Conservation Plan, 2nd ed. Manomet Center for Conservation Sciences, Manomet, MA.
- Brown, S.C., S. Schulte, B. Harrington, B. Winn, J. Bart and M. Howe. 2005. Population size and winter distribution of eastern American Oystercatchers. Wildlife Management 69: 1538-1545.
- Burger, J. 1991 Foraging Behavior and the Effect of Human Disturbance on the Piping Plover (*Charadrius melodus*). Journal of Coastal Research 7:1 39-52.
- Catlin, D. H., J. D. Fraser, J. H. Felio and J. B. Cohen. 2005. Piping plover habitat selection and nest success on natural, managed, and engineered sandbars. Journal of Wildlife Management 75: 305-310.
- Clay, R. P., A. J. Lesterhuis, S. Shulte, S. Brown, D. Reynolds and T. R. Simons. 2010. Conservation Plan for the American Oystercatcher (*Haematopus palliatus*) throughout the western hemisphere. Version 1.1. Manomet Center for Conservation Sciences, Manomet, Massachusetts.
- Cubie, D., P. Nugent, and J. Cubie. 2012. A Three-Year Shorebird Survey of the Impoundments and Beaches on Bulls Island, South Carolina. The Chat 76: 41-48.
- Dinsmore, S. J., J. A. Collazo and J. R. Walters. 1998. Seasonal numbers and distribution of shorebirds on North Carolina's outer banks. Wilson Bulletin 110: 171-181.
- Dodd, S. L., M. D. Spinks. 2001. Shorebird assemblages of the Cape Romain region, South Carolina. The Chat 65: 45-67.
- ESRI. 2009. ArcMap Version 9.3. Environmental Research Institute, Inc., Redlands, California.
- Farmer, A. H. and A. H. Parent. 1997. Effects of the landscape on shorebird movements at spring migration stopovers. The Condor 99: 698-707.
- Fernandez, G., J. B. Buchanan, R. E. Gill Jr., R. Lanctot and N. Warnock. 2010. Conservation plan for dunlin with breeding populations in North America (*Calidris alpina arcicola*, C. a. *pacifica* and C. a. *hudsonia*), version 1.1. Manomet Center for Conservation Sciences, Manoment, Massachusetts.
- Georgia Department of Natural Resources 1999–2005 Midwinter Waterbird Survey. [online] http://www.gos.org/waterbird/waterbird-survey.htm Accessed 12/15/2012.
- Hand, C. E., F. J. Sanders and P. G. R. Jodice. 2010. Foraging proficiency during the nonbreeding season of a specialized forager: are juvenile American Oystercatchers "bumble beaks" compared to adults? Condor

- 112: 670-675.
- Harrington, B. A. 2003. Shorebird management during the non-breeding season- and overview of needs, opportunities, and management concepts. Wader Study Group Bulletin 100: 59-66.
- Howe, M. A. and P. H. Geissler. 1989. Population trends of North American shorebirds based on the International Shorebird Survey. Biological Conservation 49: 185-199.
- Lafferty, K.D. 2001. Birds at a southern California beach: seasonality, habitat use, and disturbance by human activity. Biodiversity and Conservation 10: 1949-1962.
- Ledee, O. E., F. J. Cuthbert and P. V. Bolštad. 2008. A remote sensing analysis of coastal habitat composition for a threatened shorebird, the piping plover (*Charadrius melodus*). Journal of Coastal Research 24: 719-726.
- Lyons, J. E. and S. M. Haig. 1995. Fat content and stopover ecology of spring, migrant semipalmated sandpipers in South Carolina. The Condor 97: 427-437.
- Marsh, C. P. and P. M. Wilkinson 1991. The significance of the central coast of South Carolina as critical shorebird habitat. The Chat 54: 69-92.
- Meager, J. J., T. A. Schlacher, T. Nielsen. 2012. Humans alter habitat selection of birds on ocean-exposed sandy beaches. Diversity and Distributions 18: 294-306.
- Morrison, R. I. G. 2001. Estimates of shorebird populations in North America using Breeding Bird Survey data. Bird Trends 8: 12-15.
- Morrison, R. I. G., B. J. McCaffery, R. E. Gill, S. K. Skagen, S. L. Jones, G. W. Page, C. L. Trevor and B. A. Andres. 2006. Population estimates of North American shorebirds, 2006. Wader Study Group Bull.111:67–85.
- Muir, J. J. and M. A. Colwell. 2010. Snowy Plovers Select Open Habitats for Courtship Scrapes and Nests. The Condor 112: 507-510.
- Myers, J. P., R. I. G. Morrison, P. Z. Antas, B. Harrington, T. E. Lovejoy,M. Sallaberry, S. E. Senner and A. Tarak. 1987. Conservation strategy for migration species. American Scientist 75:429-435.
- Peters, K. A. and D.L. Otis. 2007. Shorebird roost-site selection at two temporal scales: is human disturbance a factor? Journal of Applied Ecology 44: 196-209.
- Prater, A. J. 1981. Estuary birds of Britain and Ireland. T. & A. D. Pyser, Calton, Great Britian.
- Rogers, D. I., P. F. Battley, T. Piersma, J. A. Van Gils and K. G. Rogers. 2006. High-tide habitat choice: insights from modeling roost selection by shorebirds around a tropical bay. Animal Behaviour 72: 563-575.
- Rodgers, J.A. and S.T. Schwikert. 2002. Buffer-Zone Distances to Protect Foraging and Loafing Waterbirds from Disturbance by Personal Watercraft and Outboard-Powered Boats. Conservation Biology 16:1 216-224.
- Saalfeld, S. T., D. T. Saalfeld, R. B. Lanctot, and S. Brown. 2011. 2010 report:

- Development of Shorebird Distribution Maps for the North Slope of Alaska Using Geospatial Habitat Modeling: The First Step in Assessing Effects of Climate Change. Unpublished report by the U.S. Fish and Wildlife Service and Manomet Center for Conservation Sciences to the Arctic Landscape Conservation Cooperative. U.S. Fish and Wildlife Service, Anchorage, AK.
- Sanders, F. J., T. M. Murphy and M. D. Spinks. 2004. Winter abundance of the American Oystercatcher in South Carolina. Waterbirds 27: 83-88.
- Sprandel, G.L., J. A. Gore, D.T. Cobb. 1997. Winter shorebird survey. Florida Game and Fresh Water Fish Comm. Final Perf. Rep. Tallahassee. 162 pp. + vi.
- Sprandel, G.L., J. A. Gore, D.T. Cobb. 2000. Distribution of wintering shorebirds in coastal Florida. Journal of Field Ornithology 71: 708-720.
- US Fish and Wildlife Service. 2001. Endangered and threatened wildlife and plants; final determinations of critical habitat for wintering piping plovers. Federal Register Vol. 66, No. 132 (7/10/2001): 36069.
- US Fish and Wildlife Service. 2014. Endangered and threatened wildlife and plants; proposed threatened status for the *rufa* red knot. Federal Register Vol. 79, no. 238 (12/11/2014): 73706-73748.
- U.S. Fish and Wildlife Service (USFWS). 2010. Cape Romain National Wildlife Refuge Comprehensive Conservation Plan. Atlanta, GA.
- Warnock N. D. and M. A. Bishop. 1998. Spring stopover ecology of migrant western sandpipers. The Condor 100: 456-467.
- Weber, L. M., and S. M. Haig. 1996. Shorebird use of South Carolina managed and natural coastal wetlands. Wildlife Management 80: 73-82.

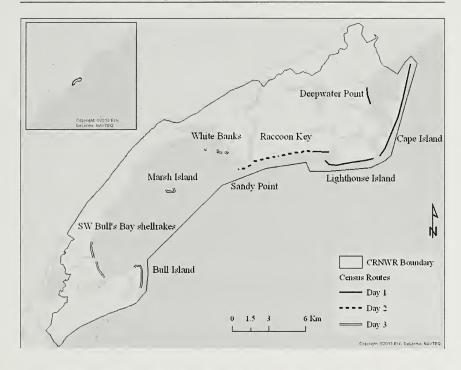


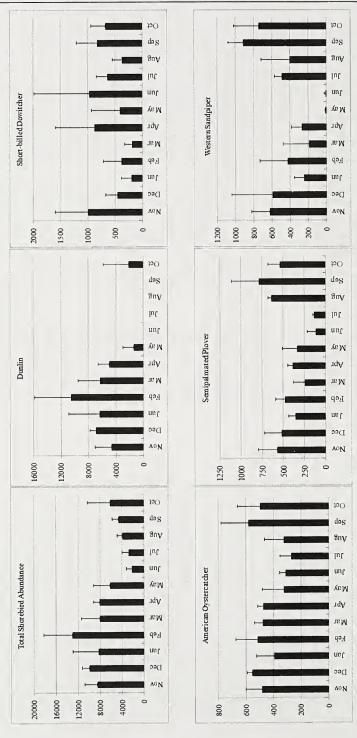
Figure 1. Routes and locations surveyed for shorebirds between November 2007 and October 2010 in Cape Romain National Wildlife Refuge (CRNWR), South Carolina.

		Year 1	•	Year 2		Year 3		Mean
Species	%	Abundance	%	Abudance	%	Abundance	%	Abundance
Dunlin, Calidris alpina	42.90	27998	58.86	51787	54.26	50557	52.01	43447
Short-billed Dowitcher, Limnodromus griseus	13.81	9010	7.44	6544	5.81	5413	9.02	6869
American Oystercatcher, Haematopus palliatus	7.33	4782	5.87	5166	6.17	5751	6.46	5233
Semipalmated Plover, Charadrius semipalmatus	7.64	4984	5.46	4804	5.88	5481	6.33	5090
Western Sandpiper, Calidris mauri	6.01	3924	5.66	4978	6.26	5837	5.98	4913
Sanderling, Calidris alba	6.35	4143	4.48	3938	5.52	5147	5.45	4409
Black-bellied Plover, Pluvialis squatarola	4.18	2727	2.90	2552	2.82	2625	3.30	2635
Ruddy Turnstone, Arenaria interpres	3.01	1967	2.46	2167	3.05	2842	2.84	2325
Red Knot, Calidris canutus	2.83	1849	2.86	2515	2.55	2379	2.75	2248
Willet, Catoptrophorus semipalmatus	3.40	2221	2.03	1782	1.52	1416	2.00	1806
Semipalmated sandpiper, Calidris pusilla	0.39	255	0.01	10	4.33	4036	2.00	1434
Marbled Godwit, Limosa fedoa	0.63	411	0.82	725	0.40	371	0.61	502
Least Sandpiper, Calidris minutilla	0.39	256	0.45	395	0.65	909	0.00	419
Wilson's Plover, Charadrius wilsonia	0.67	439	0.38	336	0.36	335	0.45	370
Whimbrel, Numenius phaeopus	0.23	147	0.17	148	0.24	227	0.21	174
Piping Plover, Charadrius melodus	0.11	73	0.05	48	0.08	75	0.08	65
Long-billed Curlew, Numenius americanus	0.03	22	0.03	56	0.04	38	0.03	29
Spotted Sandpiper, Actitis macularia	0.04	24	0.03	22	0.02	16	0.03	21
Greater Yellowlegs, Tringa melanoleuca	0.03	18	0.02	15	0.01	5	0.02	13
Killdeer, Charadrius vociferus	0.00	0	0.00	7	0.02	20	0.01	7
Unknown	0.02	10	0.01	12	0.00	0	0.01	7
Lesser Yellowlegs, Tringa flavipes	0.01	5	0.00	-	0.00		0.00	2
Pectoral Sandpiper, Calidris melanotos	0.00	0	0.00	7	0.00	0	0.00	_
Stilt Sandpiper, Calidris himantopus	0.00	0	0.00	1	0.00	0	0.00	0
Total		65265		91618		93177		82139

Table 1. Relative yearly and mean abundance of shorebirds censused monthly November 2007 - October 2010 in Cape Romain NWR, South Carolina.

	Sp	Spring		Fall	Wi	Winter
	Count	Date	Count	Date	Count	Date
All Shorebirds	11,150	Mar 10	10,401	Oct 10	18,262	Feb 09
Dunlin	9209	Mar 10	5929	Oct 10	15842	Feb 09
Semipalmated Sandpiper	3468	May 10	402	Aug 10	0	
Sanderling	2510	May 10	743	Oct 08	524	Nov 07
Short-billed Dowitcher	1917	Jun 08	1176	Sep 10	1517	Nov 07
Red Knot	1156	May 10	1185	Aug 09	139	Nov 09
Willet	1021	30 lul	258	Aug 09	68	Nov 08
Ruddy Turnstone	988	May 10	296	Oct 08	267	Nov 09
Western Sandpipers	695	30 lul	1076	Sep 08	1049	Dec 09
American Oystercatcher	531	Mar 09	176	Sep 10	849	Feb 10
Semipalmated Plover	513	May 08	1106	Sep 10	731	Nov 09
Black-bellied Plover	410	Apr 09	699	Sept 10	330	Dec 07
Marbled Godwit	286	30 lul	386	Aug 09	12	Dec 09
Wilson's Plover	221	30 lul	84	Aug 09	Ξ	Dec 09
Whimbrel	163	May 10	55	Aug 09	2	Nov 07
Least Sandpiper	31	Mar 08	1113	Sep 10	152	Dec 09
Piping Plover	10	Mar 08	15	Sep 10	12	Feb 09

Table 2. Maximum monthly counts of shorebirds and date of survey for each season. Surveys were conducted monthly for three years from November 2007 to October 2010 in Cape Romain National Wildlife Refuge, South Carolina. Spring is March through July, Fall is August through October, and Winter is November through February.





Wildlife Refuge, South Carolina, for three years from November 2007 to October 2010. Data presented for the 11 most abundant Figure 2. Mean monthly abundance and 95% confidence intervals of shorebirds censused monthly in Cape Romain National species and total assemblage of shorebirds.

							-
	Site(s)	Density Range Site(s)		Density Range Site(s)	Site(s)	Density Range	Site(s)
All Shorebirds	1° MI	5344-6681	SRK	12765-15957 MI, SRK (2)	MI, SRK (2)	12072-15090	12072-15090 MI, SRK, MRK
	2° NBI, SRK (2)	4008-5344	SRK	9574-12765	NBI	9054-12072	,
Dunlin	I° NBI, MI, SRK, MRK, SCI 696-870	028-969 1	SRK	5434-6793	SRK	3347-4184	SRK (2)
	2° -	522-696	SRK	4056-5434	SRK	2510-2929	MI
Short-billed Dowitcher	Io NBI	634-793	MI	522-652	MRK	153-191	MI
	2° -	476-634		391-522	,	114-153	MRK
American Oystercatcher 1° EWB	1° EWB	113-142	MWB	107-133	EWB	102-128	MI, MWB, EWB
	2° MI	85-113	MI	80-107	MI	77-102	WWB
Semipalmated Plover	1° SCI	111-138	SRK	118-147	SRK	146-183	SRK
	2° SRK, MRK (2)	83-111	MRK	88-118	MRK	109-146	MRK
Western Sandpiper	1° NBI, MRK	88-111	SRK	109-136	SRK	230-288	SRK
	2° SRK	88-99		81-109	MRK	173-230	MRK
Sanderling	I° NBI	126-142	MI, NBI.	MI, NBI. 106-132	NBI	141-177	NBI
	2° -	94-126		901-62		106-141	,
Black-bellied Plover	1° MRK	58-73	MRK	128-160	MRK	105-132	MRK
	2° -	44-58		96-128		79-105	MRK
Red Knot	I∘ NBI	64-80	SRK	164-205	MI	401-501	MI
	2° SP	48-64	1	123-164	-	301-401	SRK, SP
Ruddy Turnstone	1° MWB, EWB	35-44	MI	66-62	MI	204-229	MI
	2° MRK	26-35	MWB	59-59	NBI	153-204	MWB
Willet	I∘ MI	278-348	DWP	119-149	EWB, DWP, NBI 37-47	I 37-47	MI, DWP
	2° -	209-278	MI	89-119	MI	28-37	
Wilson's Plover	1° MRK	42-53	MRK	14-17	NLI, MRK, NCI	17-21	MRK
	2° -	32-42		10-14	-	12-17	NLI
Piping Plover	I° MRK	3-4	NBI	2-3	NBI	2-3	MRK
	2° WLI	2-3	MRK	c-1	MRK	1.5	

See page 79 for Table Key.

Table 3. Results of kernal density estimation (KDE) of monthly shorebird census data in the Cape Romain National Wildlife Refuge, South Carolina for Spring seasons (March through July) 2008-2010.

	Winter	Winter Year 1	Wint	Winter Year 2	Wint	Winter Year 3	Winter Combined
	Site(s)	Density Range Site(s)	Site(s)	Density Range Site(s)	e Site(s)	Density Range Site(s)	Site(s)
All Shorebirds	I° NBI	14739-18424	MI	19093-23867	SRK	19643-24553	NBI, MI,SRK, MRK
	2° -	11054-14739	SRK (2)	14320-19093	-	14732-19643	NRK
Dunlin	I° NBI	3211-4013	MI	4515-5644	SRK	4530-5663	NBI, MI, SRK, NRK
	2° -	2408-3211	-	3386-4515	-	3397-4530	MRK, WLI
Short-billed Dowitcher	1° NBI, MRK (2)	280-351	MRK (2)	217-272	MRK, WLI 187-234	187-234	SRK
	2° SBB	210-280	SBBSR	163-217	-	140-187	MRK, WLI
American Oystercatcher 1° EWB, SP, NLI	I° EWB, SP, NLI	150-188	WLI	195-243	EWB, WLI	330-412	EWB, WLI
	2° WL1	113-150	MWB	146-195	-	247-330	
Semipalmated Plover	1° MRK (2)	286-357	MRK	315-394	MRK	252-316	MRK
	2° -	214-286	-	236-315	SRK	189-252	_
Western Sandpiper	1° MRK	126-157	SRK, MRK	207-259	NBI	351-439	NBI, MRK
	2° NBI, MRK, NLI	94-126		155-207	-	263-351	SRK (2)
Sanderling	I° NBI	227-284	NBI	228-285	NBI	175-218	NBI
	2° -	170-227		171-228	-	131-175	
Black-bellied Plover	1° MRK	52-65	MRK (2)	65-81	MRK	120-150	SRK, MRK
	2° SRK	39-52	-	49-65	MRK	90-120	MRK
Red Knot	l° -	0-0	NBI	20-25	MRK	64-81	MRK, NBI
	2° -	0-0	_	15-20	-	48-64	
Ruddy Turnstone	1° MI	66-82	MI	79-77	MI	135-168	M1
	2° MWB	49-66	MWB	58-77	-	101-135	
Willet	I° SBB, NLI	18-23	DWP	44-55	DWP, NRK 34-43	34-43	DWP
	2° NCI	14-18	-	33-44	-	26-34	
Wilson's Plover	I° MRK	4-5	MRK	4-5	MRK	4-5	MRK
	2° NBI	3-4	,	3-4	-	3-4	
Piping Plover	I° NLI	3-4	WLI	2-2	WLI	4-5	NLI, WLI
	2° -	2-3	,	1-2	NEI	3-4	1

Romain National Wildlife Refuge, South Carolina for Winter seasons (Nov. through Feb.) 2007-2009. Table 4. Results of kernal density estimation (KDE) of monthly shorebird census data in the Cape

	Site(s)	Density Range Site(s)	Site(s)	Density Range Site(s)	Site(s)	Density Range Site(s)	Site(s)
All Shorebirds	1° NBI, SRK, MRK	2273-2842	SRK	3377-4222	MI	11656-14570	11656-14570 NBI, MI, SRK
	2° MRK (2)	1705-2273	NBI, MI, MRK	2533-3377	,	8742-11656	MRK, NRK
Dunlin	1° MLI	3-3	SRK	274-342	MI	3453-4317	MI, SRK, MLI
	2° -	2-3		205-274	,	2590-3453	MRK
Short-billed Dowitcher 1° SBB, MRK (2)	1° SBB, MRK (2)	127-159	MI	210-263	MI	645-806	MI
	2° EWB	95-127	SBB	157-210	1	483-645	MRK
American Oystercatcher 1° MWB	1° MWB	202-253	MWB	351-438	WWB, MWB 355-444	355-444	MWB
	2° -	152-202	EWB, WLI	263-351	WLI	266-355	WLI
Semipalmated Plover	1° MRK	316-395	MRK (2)	261-326	WLI, MRK	287-359	MRK
	2° MRK	240-316	SRK, NLI	195-261	,	215-287	
Western Sandpiper	1° MRK (2)	250-312	SRK, MRK	333-416	MI	616-771	MRK
	2° NBI, MRK	187-250	NBI	249-333	,	462-616	MI, SRK
Sanderling	1° NBI, MI	360-451	NBI, MI	214-268	NBI	236-295	NBI, MI
	2° -	270-360		160-214		177-236	
Black-bellied Plover	1° EWB, MLl, MRK (2) 70-87	70-87	MRK (2)	87-109	MI, MRK (2) 160-200	160-200	SRK MRK
	2° -	52-70	MRK, NCI	65-87	WLI	120-160	MRK
Red Knot	1° SRK	545-682	SRK	442-553	MRK	134-168	SRK
	2° -	409-545		331-442	MI	100-134	
Ruddy Turnstone	I° MI	78-98	MI	98-123	MWB, MI	115-144	MI
	2° MWB	89-78	MWB	74-98		86-115	MWB
Willet	I° NBI	47-59	NBI, WWB, NRK (2)	2) 28-35	MWB, DWP	56-63	DWP, NBI
	2° -	35-47	MI	21-28		42-56	MI, MWB, NRK (2)
Wilson's Plover	1° MRK	25-31	MRK	17-22	MRK	18-22	MRK
	2° MRK	18-25		13-17	-	13-18	,
Piping Plover	1° WLI	6-7	NLI	4-5	WLI	11-14	WL1
		t	2000	,			

See page 79 for Table Key.

Romain National Wildlife Refuge, South Carolina for Fall seasons (Aug. through Oct.) 2008-2010. Table 5. Results of kernal density estimation (KDE) of monthly shorebird census data in the Cape

KEY TO TABLES 3 - 5: All search radii were set to 600 meters and density outputs were set as individuals per square kilometer. For each dataset KDE 1° and 2° hotspots were identified if the location had a density value in the top 20th % or 40th to 21st % respectively. Sites are abbreviated as: NBI = North Bull Island, SBB = Southwestern Bull's Bay shell rakes, MI = Marsh Island, WWB = West White Banks, MWB = Middle White Banks, EWB = East White Banks, SP = Sandy Point, SRK = South Raccoon Key, MRK = Middle Raccoon Key, NRK = North Raccoon Key, SLI = South Lighthouse Island, WLI = Washover area of Lighthouse Island, MLI = Middle Lighthouse Island, NLI = North Lighthouse Island, SCI = South Cape Island, MCI = Middle Cape Island, NCI = North Cape Island, and DWP = Deepwater Point.

#### Fifty Years Ago in The Chat—June 1965

Theodore A. Beckett III provided an account of the 1964 nesting season of colonial waterbirds on Drum Island, located directly below the Cooper River bridge in Charleston, SC. For many years, the birds in this colony had been regularly killed for use as crab bait in bait pots run by local commercial crabbers. New "rigid" enforcement of bird protection laws had put an end to this practice and the colony had begun to recover.

Beckett visited the island weekly. Parts of the island were being raised by deposits of dredge spoil but the highest point was only about five feet above sea level. It was covered in marsh grasses, rushes, yaupon holly, wax myrtle and salt myrtle, and the interior had a mix of wild mulberry and palmetto trees. He documented ten species of waterbirds nesting there between March and August. It was the only known nesting site for Glossy Ibis in the state. As part of his ongoing study, Beckett captured and banded a total of 5,600 birds. Field conditions were harsh and he noted "mosquito nets were necessary as well as heavy jackets when the population built up in late June".

Many of the young birds did not survive due to both natural and maninduced causes. Black-crowned Night-Herons preyed on the nestlings of White Ibis and Cattle Egrets. "Frequently", nestlings that had fallen from nests were found impaled on the stiff spines of yucca leaves. However, the most serious impact to the survival of the chicks was caused by the application of a pesticide called "granular BHC", used in mosquito control. The chemical was broadcast from an airplane directly over the island nests and marsh areas. Beckett documented several hundred young "in all stages of paralization for about three weeks after the application". Later, he found between two and three thousand nestlings had disappeared when they should have been the right size for banding, but he remained unsure as to the exact cause of death. Beckett concluded that "if this colony can be protected from human exploitation, there is every indication that it will expand in numbers". Today, wading birds still nest on small parts of the island. However, about three-quarters of the island is used by the S.C. State Ports Authority for drying dredge material.

#### 2014 Fall Bird Counts in South Carolina

#### Steven J. Wagner

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Five counts were held for the Fall 2014 Bird Count. The counts were held September 13 through October 4 in Greenville, Spartanburg, Cherokee, and Aiken counties and Congaree National Park. One hundred ten participants recorded a total of 142 species and 15008 individuals. The total number of individuals counted was up from last year's 12687, but the species total was down from the 149 reported last year. The number of warbler species reported, 24, was down compared to the 29 reported last year.

There were high numbers of certain species reported on a couple of the counts. Congaree National Park had 255 Swainson's Thrushes during a predawn count. Greenville reported 423 Broad-winged Hawks and 562 Rubythroated Hummingbirds.

#### Greenville County: September 20, 109 species, 4035 individuals

Compiler:

Paul Serridge

4 Audrey Lane Greenville, SC 29615

Participants:

Joan Baker, Shelby Birch, Patrick Brice, Jim Buschur, Donnie Coody, Don Cox, Steve Cox, Vicki Cox, Brad Dalton, Denise DuPon, Ed Engasser, Chip Gilbert, Sara Gilbert, Genny Hill, JB Hines, Rob Hunnings, Jerry Johnson, David Kirk, Len Kopka, Jane Kramer, Tim Lee, Anthony Martin, Eric McFalls, Keith McCullough, Chris Peak, Merikay Pirrone, John Quinn, Paul Serridge, Tim Taylor, Tonita Thompson, Dennis Trapp, Charles Webb,

Judith Webb, Susan Zickos

Although everyone reported a "slow day" the total figures of both species and individuals are very reasonable. Thirty-four people - 24 GCBC members and 10 non-members - participated in the count which covered more than 20 different sections of Greenville County. The combined reports listed 109 species (+ 2 other taxa) and 4035 individual birds. The count included the Simpsonville and Fountain Inn areas, not covered in prior years, and in those sections we added 2 species to the combined Fall Count list, Eurasian Collared-Dove and Loggerhead Shrike, bringing it to 155.

Other highlights included a Golden-winged Warbler, photographed at Bunched Arrowhead by Keith McCullough, and over 500 hummingbirds at Judith Webb's property (number estimated from the consumption of 1.25 gallons of liquid at her feeders!)

Spartanburg County: September 27, 100 species, 4661 individuals

Compiler: Lyle Campbell

126 Greengate Lane

Spartanburg, SC 29307-2215

Participants: Doug Allen, Carole Anderson, Tim Brown, Dan Bryant,

David Campbell, Lyle Campbell, Sarah Campbell, Timothy Campbell, Alan Chalmers, Cheryl Cooksey, Dan Codispoti, Sharon Donovan, Ed Elam, Kathleen Elam, Carol Fietel, York Fietel, Pat Fowler, Roy Fowler, J. B. Hines, Jerry Johnson, Don Knight, Marilyn Knight, Joe Mitchell, Mary Ann Myers, Bob Powell, Sandra Powell, Glen Peterson, Eva Pratt, Sam Pratt, Doug Rayner, Stan Sargent, Bob Scott, Mac Shealy, Kristin Taylor, Gerald Thurmond, Kay Wealden, Richard Wealden, Dan Wootton, Nancy Wootton

Spartanburg had a good Fall Count with 100 total species, including 14 warbler species. Sparrows and blackbirds were scarce. One chimney attracted 870 migrating Chimney Swifts at dusk. Lake Blalock yielded an adult Bald Eagle. Four different parties found Rose-breasted Grosbeak. The 2014 count was three weeks later than our traditional scheduling which may have tapped into a different phase of migration.

Cherokee County: September 13, 69 species, 1391 individuals

Compiler: Lyle Campbell

126 Greengate Lane Spartanburg, SC 29307

Participants: David Campbell, Lyle Campbell, Sarah Campbell, Timothy

Campbell, Claude Cobb, J. B. Hines, Jerry Johnson, Karla

Lavender, Mark Lwin, Joseph Oyugi, Peggy Yo

Cherokee County birders found 69 species, including 10 species of warblers. The Shrike is always a good bird in the Upstate.

Aiken County: October 4, 87 species, 2187 individuals

Compiler: Anne Waters

1621 Apple Valley Dr. Augusta, GA 30906

Participants:

Tom Cofer, Larry Eldridge, Judy Gregory, Carl Huffman, Willie Malpass, Onjulique Orsten, George Reeves, Lois Stacey, Peter Stangel, Anne Waters, Calvin Zippler

#### Congaree National Park: September 28, 70 species, 1159 individuals

Compiler: John Grego

Participants: Ron Ahle, Addison Barrack, Hilda Flamholtz, Jon

Flamholtz, Bailey Foster, John Grego, Rhonda Grego, Susan Hamilton, Erin Hamner, Siobhan Kibbey, Carol Kososki, Laura Kososki, Josi Laurenço, Kathleen O'Grady,

Sallie Prugh

A Fall 2014 Migration Count was held September 28 at Congaree National Park. Large numbers of Swainson's Thrush were heard just before dawn as part of a nocturnal flight call count. Friends of Congaree Swamp sponsored an organized walk on the Low Boardwalk and Sims Trail in the morning, and a small group later visited the east end of the park in the afternoon. Though few warbler species were seen in general, a Blackburnian Warbler was seen and photographed at Little Buckhead. We recorded good counts of other migrants, including 14 American Redstart, 3 Scarlet Tanager, and 5 Magnolia Warbler. Other highlights included a Merlin and Painted Bunting. A total of 70 species and 1159 individuals were seen.

Table 1. Fall 2014 bird counts in South Carolina

	Greenv	Spart	Cherok	Aiken	Congar	Total
Canada Goose	203	596	147	30		976
Wood Duck	47		2	20		69
Gadwall		4				4
Mallard	95	198				293
Blue-winged Teal		8		99		107
Northern Shoveler				2		2
Northern Bobwhite	1	8	2			11
Wild Turkey	18	9	38	9		74
Pied-billed Grebe	2	5		1		8
Wood Stork				24		24
Double-crested Cormorant					1	1
Anhinga				6	1	7
Great Blue Heron	7	24	3	6	4	44
Great Egret	2	6	2	15	4	29
Little Blue Heron				5	1	6
Cattle Egret				178		178
Green Heron	3	1				4
White Ibis				6	1	7
Black Vulture	14	18	29	72	13	146
Turkey Vulture	73	51	15	46	4	189
Osprey	3	4	1			8
Bald Eagle	5	1	1	2	1	10
Northern Harrier		1				1

	Greenv	Spart	Cherok	Aiken	Congar	Total
Sharp-shinned Hawk	3	3			3	9
Cooper's Hawk	10	1	1			12
Red-shouldered Hawk	21	12	7	19	5	64
Broad-winged Hawk	423	2				424
Red-tailed Hawk	13	15	5	6	2	41
Killdeer	39	35	16	31		121
Spotted Sandpiper	4		1	4		9
Solitary Sandpiper	1			5		6
Greater Yellowlegs				16		16
Lesser Yellowlegs				4		4
Least Sandpiper				33		33
Pectoral Sandpiper				3		3
Wilson's Snipe	(2	117	1.70	3	1	3
Rock Pigeon	62	117	172	5	1	357
Eurasian Collared-Dove	9	18.	200	1	1.2	28
Mourning Dove	94	182	208	44	13	541
Yellow-billed Cuckoo	5	2	1	6	13	27
Eastern Screech-Owl	5	5			1	10
Great Horned Owl	2	4 7		1	1	7
Barred Owl	10		1	1	15	34
Common Nighthawk	117	3 1051	20			1107
Chimney Swift	117 562	29	29 2	4		1197 597
Ruby-throated Hummingbird	10	29	1	4 4	1	
Belted Kingfisher Red-headed Woodpecker	21	3	2	4	1 3	36 33
Red-bellied Woodpecker	52	42	12	35	23	164
Yellow-bellied Sapsucker	32	2	12	33	23	2
Downy Woodpecker	34	14	3	19	14	84
Hairy Woodpecker	4	3	1	19	3	11
Northern Flicker	6	15	1	14	17	53
Pileated Woodpecker	18	10	7	9	14	58
American Kestrel	1	2	2	8	17	13
Peregrine Falcon	2		2	1		3
Eastern Wood-Peewee	11	13	7	7	6	44
Acadian Flycatcher	1	13	,	,	9	10
Empidonax, sp	•	1				1
Eastern Phoebe	27	52	5	11	2	97
Great Crested Flycatcher	1	3		• •	-	4
Eastern Kingbird	_	3				3
Loggerhead Shrike	3		2			5
White-eyed Vireo	18	2	5	9	9	43
Yellow-throated Vireo	3		1	4	1	9
Blue-headed Vireo	4	2				6
Red-eyed Vireo	23	1	7		15	46
Blue Jay	144	216	38	50	13	461
American Crow	207	221	123	86	11	648
Fish Crow	33	2		3	2	40
Common Raven	3					3
Tree Swallow				101		101
Northern Rough-winged				218	22	
Swallow						240
Cliff Swallow				1		1
Barn Swallow				47	2	49
Carolina Chickadee	139	81	33	31	20	304
Tufted Titmouse	103	97	37	42	26	305
White-breasted Nuthatch	39	14	3	11	12	79
Brown-headed Nuthatch	13	12	4	11	6	46

	Greenv	Spart	Cherok	Aiken	Congar	Total
House Wren	1	4		5	1	11
Carolina Wren	122	86	36	75	39	358
Blue-gray Gnatcatcher	6	1	8		1	16
Golden-crowned Kinglet	1					1
Ruby-crowned Kinglet		3		3		6
Eastern Bluebird	117	217	46	20	3	403
Veery	2			1		3
Gray-cheeked Thrush	1				10	11
Swainson's Thrush	12				255	267
Hermit Thrush	2	4				6
Wood Thrush	14	4			5	23
American Robin	54	149	27			230
Gray Catbird	26	19	1	6	1	53
Northern Mockingbird	57	91	16	28		192
Brown Thrasher	27	36		15	1	79
European Starling	93	260	165	16		534
Ovenbird	2					2
Worm-eating Warbler	2				1	3
Golden-winged Warbler	1					1
Black-and-white Warbler	6	4	1	3	1	15
Tennessee Warbler	2		1			3
Kentucky Warbler				1		1
Common Yellowthroat	8	4	1	6	3	22
Hooded Warbler	12		1			13
American Redstart	25	5	4	5	20	59
Cape May Warbler	2	1				3
Northern Parula	5	1		16	25	47
Magnolia Warbler	11	5		1	5	22
Bay-breasted Warbler	1					1
Blackburnian Warbler	1	1	1		1	4
Yellow Warbler	1	1		1		3
Chestnut-sided Warbler	8	3	1	4		16
Black-throated Blue Warbler	4				2	6
Palm Warbler	11	13		14		38
Pine Warbler	17	10	11	25	21	84
Yellow-rumped Warbler		4	,			4
Yellow-throated Warbler		1	1			2
Prairie Warbler	4	1	2			3
Black-throated Green Warbler	4					4
Yellow-breasted Chat	1					1
Eastern Towhee	22	25	12	15	8	82
Chipping Sparrow	37	46	18	5	o	106
Field Sparrow	26	31	8	3		65
Savannah Sparrow	20	1	O			1
Grasshopper Sparrow		2				2
Song Sparrow	3	19				22
White-throated Sparrow	5	16				16
Dark-eyed Junco	15	10				15
Summer Tanager	1	3		2	5	11
Scarlet Tanager	12	1	1	1	3	18
Northern Cardinal	147	176	19	86	25	453
Rose-breasted Grosbeak	7	7			-	14
Blue Grosbeak	1				3	4
Indigo Bunting	22	24	3	20	25	94
Painted Bunting				5	1	6
Bobolink		1				1

					-	
	Greenv	Spart	Cherok	Aiken	Congar	Total
Red-winged Blackbird	Greenv	Spart	1	96	13	110
Eastern Meadowlark	3	6	7	70	15	16
Brewer's Blackbird	3	4	,			4
Common Grackle	126	26	5	40	1	198
Brown-headed Cowbird	25	9		31	350	415
House Finch	41	27	4	1	200	73
American Goldfinch	110	45	13	2	2	172
House Sparrow	6	13		3		22
<b>.</b>						
Species	109	100	69	95	70	142
Individuals	4035	4661	1391	3762	1159	15008
Regular Count						
Hours foot		32.75	9	18.5		60.25
Hours car		12.5	5.5	14.3		32.3
Hours boat		2.5				2.5
Hours canoe/kayak				2		2
Hours bike		1				1
Miles foot	32.95	32.5	8.5	7.5	8.5	89.95
Miles car	231.2	335	183	182.5	16	947.7
Miles boat		12		0		12
Miles canoe/kayak	1	2		8		9
Miles bike		3				3
# Regular parties		12	5	5		34
# Regular observers		15	10	11	15	72
#Species		92	68	87	15	, 2
#Individuals		3159	1373	2147		6679
Feeder Watch						
Hours Feeder Watch		44.5	6	1		51.5
#Feeder Watchers		24	2	1		27
#Feeder Stations		17	2	3		22
#Species		52	9	12		
#Individuals		613	17	40		670
Nocturnal						
Hours Nocturnal	3	2	1	0.75	3	6.75
Miles Nocturnal	3	4.5	4	4.5	3	13
#parties nocturnal	5	6	1	1		13
#observers nocturnal	3	9	1	1		11
#Species		5	1	0		11
#Individuals		890	1	0		891
" mar viduals		0,0	•	Ü		071
Total						
Party Hours	92.4	90.75	21.5	36.55	12	255.7
Party Miles	265.15	379	196.5	202.5	24.5	1067.65
TT:	0.500	0.000	0.77.00	0.500	0.400	
Time start	0500	0700	0700	0530	0400	
Time stop	1750	2200	2100	1730	1600	
Temperature: pre-dawn	63	65		59		
dawn	63	63	72	60		
AM		68		64		
noon	70	70		67		
PM	79	78	86	69		

	Greenv	Spart	Cherok		Congar	Total
sunset		72		67		
night		68		67		
wind: pre-dawn	ene			sw 5		
dawn	ene			sw 5		
AM	ene			w 5-10		
noon	ene			w10-15		
PM	ene			w10-15		
sunset	ene			w10-15		
night	ene			w 10		
%clouds: pre-dawn			100	30		
dawn			100	30		
AM			100	20		
noon			100	20		
PM			100	10		
sunset			100	10		
night			100	10		
8						
precipitation: pre-dawn	0	0	light	0		
dawn	0	0	light	0		
AM	0	0	0	0		
noon	0	0		0		
PM	0	0		0		
sunset	0	0		0		
night	0	0		0		

#### **BRIEFS FOR THE FILES**

Josh Southern 203 Hyannis Drive Holly Springs, NC 27540 joshsouthern79@gmail.com

(All dates Winter 2014-2015, unless otherwise noted)

Briefs for the Files is a seasonal collection of uncommon-to-rare or unusual North and South Carolina bird sightings and events which do not necessarily require a more detailed Field Note or article. Reports of your sightings are due the 20th of the month after the end of the previous season.

Winter	December 1 - February 28	due March 20
Spring	March 1 - May 31	due June 20
Summer	June 1 - July 31	due August 20
Fall	August 1 - November 30	due December 20

Reports may be submitted in any format, but I prefer that you use email, list multiple sightings in taxonomic order (rather than by date or location), and type your report directly into the body of the email. If your sightings are in a file, please copy-and-paste the text into the body of the email, rather than sending an attachment.

Suitable reports for the Briefs include any sightings you feel are unusual, rare, noteworthy, or just plain interesting to you in any way! It is my responsibility to decide which reports merit inclusion in the Briefs.

Please be sure to include details of any rare or hard-to-identify birds.

I rely in part on sightings reported in Carolinabirds. Please don't, however, rely on me to pick up your sightings from Carolinabirds. Instead, please also send your sightings directly to me as described above.

If I feel that your sighting warrants a Field Note, I will contact either you or the appropriate state Field Notes editor. You may, of course, submit your Field Note directly to the editor without going through me.

Reports published herein may include sightings that require review by the state bird record's committee. Such reports are not considered accepted records until, and unless, they are so ruled by the committee.

Abbreviations: **BRC** – Bird Record Committee, **CBC** – Christmas Bird Count, **Co** – County, **et al.** – (*et alius*) and others, **Ft** – Fort, **m. obs.** – multiple observers, **Mt** – Mount, **NC** – North Carolina, **NM** – National Monument, **NP** – National Park, **NWR** – National Wildlife Refuge, **Rd** – Road, **SC** – South Carolina, **SP** – State Park, **WMA** – Wildlife Management Area, **WTP** – Water Treatment Plant

Greater White-fronted Goose: Well-reported this winter, Greater Whitefronted Geese were especially numerous in western NC towards the end of the period. 30 around Ecusta Pond in Brevard, Transylvania Co, NC, 11 Feb (Simon Thompson), 14 Feb (Steve Ritt), and 22 Feb (Jerry Griggs), was the second highest count ever made in the mountain region. Other sightings made in mountains and western Piedmont of NC included two on Lake Junaluska, Haywood Co, 7 Dec (Robert Johnson) through 31 Jan (Vincent Weber); one amongst Canada Geese at Farris Memorial Park, Rockingham Co, 7-10 Dec (Ron Morris, Martin Wall, et al.); four at Farris Memorial Park, 20 Jan (Wall); one at the WTP along NC-191 in Henderson Co, 25 Jan (Michael Plaster) into March (Wayne Forsythe, Simon Harvey, m. obs.); eight at Kituwah Mound, Swain Co, 10 Feb (Andy Zivinsky); six on W. Kerr Scott Reservoir, Wilkes Co, 19 Feb (Jamie Adams, Guy McGrane) through 22 Feb (Eric Harrold, Issac Kerns, et al.); four at YMCA Camp Harrison (limited access), Wilkes Co, 22 Feb (Harrold); and one on a pond in western Alexander Co, 24 Feb (Dwayne Martin). Strangely, two seen in Washington Co, during the Pettigrew SP CBC, 30 Dec (Ed Corey) provided the only report from the NC coastal plain. In SC, sightings included six on the Santee NWR CBC, 20 Dec (fide Dennis Forsythe); three in the Bluff Unit of Santee NWR, Clarendon Co, 30 Dec (Craig Watson); one on the campus of Charleston Southern University, Charleston Co, 24 Jan (Pam Ford) into February (m. obs.); and ten at Bear Island WMA, Colleton Co, 27 Feb (Craig Watson).



Greater White-fronted Geese, 20 January 2015, Rockingham Co, NC. Photo by Martin Wall.

Snow Goose: 30,573 on the Mattamuskeet NWR CBC, 29 Dec (fide Susan Campbell) and 57,255 on the Pettigrew SP CBC, 30 Dec (fide Doug LeQuire) were impressive totals. West of the species' typical range in NC were two at multiple sites in Wilkes Co, 4 Dec (Dwayne Martin) into spring (m. obs.); a dark-morph bird on the upper end of Falls Lake in Durham Co, during the Durham CBC, 14 Dec (Brian Bockhahn); one on Lake Townsend, Guilford Co, 17 Dec (Lou Skrabec); one at the WTP along NC-191 in Henderson Co, 17 Dec (Marilyn Westphal) into February (m. obs,); and one around Yates Mill County Park, Wake Co, 5 Jan (Rebeccah Cope, et al.) through 27 Feb (Mike Turner). Like Greater White-fronted Geese, good numbers of Snow Geese were seen at multiple sites in the NC mountains towards the end of the period—two on Lake Osceola, Henderson Co, 22 Jan (Simon Thompson) into spring (m. obs.); three dark-morph birds at Kituwah Mound, Swain Co, 7 Feb (Jeremey Hyman); 80, the highest count ever made in the NC mountains, in flight over Butler Bridge Rd in Mills River, Henderson Co, 9 Feb (Wayne Forsythe); 13, including ten dark-morph birds, at Kituwah Mound, 10 Feb (Andy Zivinsky); two on a pond at Maggie Valley Club & Resort, Haywood Co, 14 Feb (Robert Johnson); and 20 in flight over Brevard, Transylvania Co, 14 Feb (Steve Ritt). Sightings in SC included a dark-morph bird at Bolton's Landing, Charleston Co, 2 Jan through 14 Feb (Pam Ford); seven on the Sea Islands CBC, 5 Jan (fide Aaron Given); and two at Berry Shoals Pond in Spartanburg Co, 26-27 Feb (Simon Harvey).

Ross's Goose: Sightings of this rare goose have increased in recent years. As usual, the huge flocks of Snow Geese that winter around the Pungo Unit of Pocosin Lakes NWR in Washington Co, NC, held the highest number of Ross's Geese, with 21, a new record high count, seen there 11 Jan (Derb Carter, Harry LeGrand, Jeff Pippen). Other sightings in NC included one at Deer Lake in Brevard, Transylvania Co, 30 Nov (Wayne Forsythe, Ron Selvey) through 7 Dec (Aaron Steed); two at different sites in Wilkes Co, in early December (Walt Kent, Dwayne Martin, Barbara Miller, m. obs.); one at Farris Memorial Park in Rockingham Co, 7-11 Dec (Marty Wall); one in northern Durham Co, 14-28 Dec (Tom Krakauer, Scott Winton, et al.); two at the Oak Valley Golf Club in Davie Co, 15-23 Dec (David & Susan Disher, et al.); one at Veterans Park in New Hanover Co, 15-19 Dec (Andy Fairbanks, m. obs.); five in Dare Co, during the Bodie-Pea Island CBC, 28 Dec (fide Paul Sykes); one in northwestern Forsyth Co, 2-5 Jan (Shelley Rutkin, et al.); and one at the WTP along NC-191 in Henderson Co, 10 Jan (Glenda & Jon Smith) through 21 Feb (Jerry Griggs). Sightings made in SC included one on the Clemson CBC, 20 Dec (fide Drew Lanham); one with Canada Geese at The Market Common in Myrtle Beach, Horry Co, 2 Jan (Dick & Dorothy Rosche); two in the Del Webb Community in Berkeley Co, 10 Feb (Charlene King) through 22 Feb (Dennis Forsythe); and two on a pond in West Ashley, Charleston Co. 28 Feb (Chet Morse) into March (m. obs.).



Ross's Goose, 05 January 2015, Forsyth Co, NC. Photo by David Disher.

**Brant:** 4,015 on the Portsmouth Island CBC, 29 Dec (fide Peter Vankevich) was an unusually high count and the sixth highest total on any 2014 Audubon CBC.

Cackling Goose: One of the more remarkable events this winter was the residence of ten Cackling Geese in a relatively urban area around Salem Lake in Winston-Salem, Forsyth Co, NC, 31 Dec (John Haire) through 24 Feb (m. obs.). It's interesting that this new record count for the Carolinas was made in an urban area of the Piedmont rather than a wildlife refuge in the coastal plain. Other sightings, all in NC, included up to three at the pond at the Beasley Rd exit along US-64 in Washington Co, throughout the winter (m. obs.); one in northwestern Forsyth Co, 8-13 Dec (Cynthia Donaldson, Shelley Rutkin, et al.); two in the Pungo Unit of Pocosin Lakes NWR, Washington Co, 11 Jan (Derb Carter, Harry LeGrand, Jeff Pippen); and two on Lake Hickory in Alexander Co, 21 Feb (Dwayne Martin).

**Trumpeter Swan:** Two were seen in the Pungo Unit of Pocosin Lakes NWR, Hyde Co, NC, in January—an adult photographed in the company of Tundra Swans, 4 Jan (Keith Ramos) and an immature bird seen 11 Jan (Derb Carter, Harry LeGrand, Jeff Pippen). There are only two previous accepted records of this species in NC.

**Tundra Swan:** 200 at Bear Island WMA, Colleton Co, SC, 27 Feb (Craig Watson) was a remarkable count for a site so far south.

Eurasian Wigeon: Sightings, all of adult drakes, included two at Mattamuskeet NWR, Hyde Co, NC, during its CBC, 29 Dec (fide Susan

Campbell); one at Donnelly WMA, Colleton Co, SC, 15 Jan (Keith McCullough, Chet Morse); one at Savannah NWR, Jasper Co, SC, 24 Jan (Eric Haskell, Lois Stacey, et al.) through 16 Feb (Kathleen O'Grady); and one at Santee Coastal Reserve, Charleston Co, SC, 9 Feb (Steve Compton, et al.) through 25 Feb (David Gardner).

American Wigeon: 17,058 on the ACE Basin CBC, 28 Dec (fide David Chamberlain) was a record number for that count as well as the highest total of any 2014 Audubon CBC.

**Mottled Duck:** 1,099 on the ACE Basin CBC, 28 Dec (fide David Chamberlain) was a record number for that count as well as the highest total of any 2014 Audubon CBC. In NC, where the species is rare, one was seen on a pond adjacent to the NC Aquarium at Ft Fisher, New Hanover Co, 2 Jan (Ron Clark) into spring (m. obs.).

"Eurasian (Common) Teal": Formerly considered a separate species, individual Eurasian Teals were found amongst Green-winged Teals at Mattamuskeet NWR, Hyde Co, NC, during its CBC, 29 Dec (fide Susan Campbell); at the Bodie Island Lighthouse Pond, Dare Co, NC, 1 Jan (Jeff Lemons, et al.); and at Alligator River NWR, Dare Co, NC, 31 Jan (Derb Carter, Jesse Pope) and 7 Feb (Dick Barmore, et al.).

Common Eider: This rare winter visitor was reliably seen at two sites along the South Carolina coast during the mid-to-late winter. Off Edisto Beach SP, Colleton Co, four eiders, one adult drake and three immature drakes, were seen 14 Dec (Sidney Gauthreaux) and 17 Dec (Cherrie Sneed); two, one adult drake and one immature drake, were seen from mid-December (m. obs.) through 19 Feb (Aija Konrad, Sneed); and one, the immature drake, remained through 28 Mar (Jack Rogers). Around Murrells Inlet in Georgetown Co, an adult drake found during the Litchfield-Pawleys Island CBC, 30 Dec (fide Chris Hill) was seen and photographed by many until last seen 2 Mar (Ryan Justice). Sightings along the North Carolina coast included three in flight off Johnnie Mercer's Pier in Wrightsville Beach, New Hanover Co, 26 Dec (Derb Carter); three around Hatteras Landing, Dare Co, during the Cape Hatteras CBC, 27 Dec (fide Pat Moore); a drake off Carolina Beach, New Hanover Co, 9 Jan (Mark Jones); one off Johnnie Mercer's Pier, 26 Jan (Sam Cooper, Sherry Lane); an immature drake off North Topsail Beach, Onslow Co, 27 Jan (Gilbert Grant); one at Hatteras Landing, 20 Feb (Nathan Gatto); and four, two hens and two immature drakes, off Cape Point, Dare Co, 28 Feb (Brian Patteson).

Harlequin Duck: One was seen during the Southport-Bald Head-Oak Islands CBC, 4 Jan (fide Ron Clark). Two were seen at the south end of the Bonner Bridge in Dare Co, NC, 12 Feb (Jim Gould). An immature drake was seen foraging around the pilings of several fishing piers in southern Dare Co, NC, during the late winter—at the Rodanthe Pier, 25 Jan (Ricky Davis, David Howell) through 8 Feb (Sherry Lane); at the Frisco Pier, 14 Feb (Jeff Lemons);

and at the Avon Fishing Pier, 21 Feb (Michael Gosselin).

**Surf Scoter:** Five, including one adult drake, on Lake Townsend, Guilford Co, NC, 3 Dec (Andrew Thornton) and one first-winter drake at Swann WTP in Forsyth Co, NC, 25 Jan (Mike Conway, Phil Dickinson, et al.) were good finds for those inland sites.

White-winged Scoter: Eight on Lake Julian, Buncombe Co, NC, 5 Dec (Wayne Forsythe) may have been the highest count ever made in our mountains. A hen photographed at Indian Bluff Recreation Park, Orangeburg Co, SC, 20 Dec (Sidney Gathreaux) was a good find for that inland site. Like last year, an influx of White-winged Scoters occurred on lakes in the western half of NC during the late winter, probably due to the freezing of lakes north of our region. Those sightings included nine on Lake Hickory, border of Alexander Co and Catawba Co, 16 Feb (Dwayne Martin); a first-winter bird on Belews Lake, Rockingham Co, 16 Feb (Martin Wall); one on Lake James, Burke Co, 22 Feb (Martin); two on Lake Tillery, border of Montgomery Co and Stanly Co, 22 Feb (Mike McCloy); four, including three adult drakes, on Lake Brandt, Guilford Co, 25 Feb (Henry Link); three on Lake Crabtree, Wake Co, 25 Feb (Brendan Klick); three first-winter drakes at Archie Elledge WTP, Forsyth Co, 28 Feb (Phil Dickinson); and 11 on Lake Brandt, 28 Feb (Link).

**Black Scoter:** One found on the Clemson CBC, 20 Dec (fide Drew Lanham) was a good find for that inland site and a first for that count.

Long-tailed Duck: Rare inland sightings, all from NC, included two, a drake and a hen, on Buckhorn Reservoir, Wilson Co, 7 Dec (Ricky Davis); a hen on Salem Lake, Forsyth Co, 31 Dec (Marbry Hopkins, et al.); a hen on Lookout Shoals Lake, Catawba Co, 28 Jan (Dwayne Martin); a drake on a golf course pond in Rockingham Co, 20 Feb (Martin Wall); a drake at YMCA Camp Harrrison (limited access), Wilkes Co, 22 Feb (Eric Harrold); and one on Jordan Lake, Chatham Co, 28 Feb (David Howell). 14 at Masonboro Inlet, New Hanover Co, NC, 15 Feb (Sam Cooper) was an impressive count for that area. Along the SC coast, two, a drake and a hen, were seen at Murrells Inlet, Georgetown Co, 25 Jan (Pam Ford, et al.); one was seen at Cape Romain NWR, Charleston Co, 7 Feb (David McLean) and 8 Feb (Paul Serridge); and three were seen at Murrells Inlet, 27 Feb (Cherrie Sneed).

Common Goldeneye: Two drakes stuck around awhile on Lake Junaluska, Haywood Co, NC, 18 Dec (Connie & Stan Wulkowicz) through 19 Jan (Shawn Kurtzman). Like last year, there was an influx of Common Goldeneyes into our region during the late winter, probably due to the freezing of lakes north of our region. A few of the higher counts were up to four hens at Swann WTP in Forsyth Co, NC, 17 Jan through 19 Feb (Teresa Edwards, John Haire, et al.); 13 on the Newport River near Morehead City, Carteret Co, NC, 18 Jan (John Fussell, Jeannie Kraus, et al.); four at Huntington Beach SP, Georgetown Co, SC, 16 Feb (Keith McCullough); six on Lake Hickory in Alexander Co, NC,

21 Feb (Dwayne Martin); and 15 on W. Kerr Scott Reservoir, Wilkes Co, NC, 25 Feb (Guy McGrane).

Common Merganser: 881 on Lake Phelps, Washington Co, NC, during the Pettigrew SP CBC, 30 Dec (fide Doug LeQuire) provided a remarkable tally for our region and a record number for that count. Rare along the coast, a Common Merganser was seen on the Bogue Sound in Morehead City, Carteret Co, NC, 11 Dec (John Fussell) and 16 Dec (Craig Harms); and four were seen on South Pond, Pea Island NWR, Dare Co, NC, 17 Jan (Jeff Lewis). Like other diving ducks and similar to the events of last year, an influx of Common Mergansers occurred on lakes in the western half of our region during the late winter. Those sightings included three on Lake Norman, Mecklenburg Co, NC, 8 Jan (Tom Sanders, Rob Van Epps); six on Lake Bowen, Spartanburg Co, SC, 30 Jan (Roger Smith); six drakes on Salem Lake, Forsyth Co, NC, 20-22 Feb (John Haire, et al.); 24 on W. Kerr Scott Reservoir, Wilkes Co, NC, 22 Feb (Issac Kerns); eight amongst the two lakes north of Greensboro, Guilford Co, NC, 26 Feb (Henry Link); 13 at Riverbend Park in Catawba Co, NC, 28 Feb (Dwayne Martin); and three at Lake Junaluska, Haywood Co, NC, 28 Feb (James Poling, Connie & Stan Wulkowicz, et al.).

**Red-throated Loon:** Rare inland, individual Red-throated Loons were found on the Southern Lake Norman CBC, 14 Dec (fide Taylor Piephoff); at the Swann WTP in Forsyth Co, NC, 18 Feb (Nathan Gatto, John Haire); on Falls Lake in Wake Co, NC, 21 Feb (Thierry Besançon); and on Lake Robinson, Greenville Co, SC, 25 Feb (Derek Aldrich).

**Pacific Loon:** Individuals were found off Johnnie Mercer's Pier in Wrightsville Beach, New Hanover Co, NC, 26-27 Dec (Derb Carter), and 31 Jan (Sam Cooper); and off the beach just north of Cape Point, Dare Co, NC, 25 Jan (Ricky Davis, David Howell).

**Common Loon:** 730 on the Camp Lejeune CBC, 18 Dec (fide John DeLuca) was the highest count made on any 2014 Audubon CBC.

Red-necked Grebe: Sightings included one on Lake Townsend, Guilford Co, NC, intermittently throughout the period (Henry Link, Lou Skrabec, m. obs.); two on Lake Marion in Orangeburg Co, SC, 10 Dec (Dick & Dorothy Rosche); one on Falls Lake in Durham Co, NC, 11 Dec (Andrew Thornton); two off the Oceanana Pier in Atlantic Beach, Carteret Co, NC, during the Morehead City CBC, 14 Dec (Ricky Davis); one on the Southern Lake Norman CBC, 14 Dec (fide Taylor Piephoff); one at the Savannah Spoil Site (restricted access), Jasper Co, SC, 3 Jan (Matthew Sarver) through 18 Jan (Steve Calver); one on the ocean off Pea Island NWR, Dare Co, NC, 1 Feb (Davis); one off Kill Devil Hills, Dare Co, NC, 4 Feb (Sam Cooper); one on Lake Crabtree, Wake Co, NC, 16-20 Feb (Tom Snow, m. obs.); one off of Hatteras, Dare Co, NC, during a pelagic trip, 16 Feb (Brian Patteson, Chloe Walker, et al.); two on W. Kerr Scott Reservoir, Wilkes Co, NC, 20 Feb (Jesse Pope, et al.); and two on Lake Tillery, border of Montgomery Co and Stanly

Co, NC, 22 Feb (Mike McCloy).

**Eared Grebe:** Two on the Pamlico County CBC, 16 Dec (fide Liz Lathrop) were new to that count. Individuals were found at Masonboro Inlet, New Hanover Co, NC, 16 Jan (Sam Cooper); off the beach just north of Cape Point, Dare Co, NC, 25 Jan (Ricky Davis, David Howell); off North Topsail Beach, Onslow Co, NC, 27 Jan (Gilbert Grant) through 28 Feb (Sherry Lane); and in a small pond near the Cape Hatteras Lighthouse, Dare Co, NC, 13 Feb (Keith Camburn).

**Northern Fulmar:** Counts of six were made on pelagic trips out of Hatteras, Dare Co, NC, 7 Feb & 14 Feb (Brian Patteson, et al.).

**Manx Shearwater:** 16 on a pelagic trip out of Hatteras, Dare Co, NC, 14 Feb (Brian Patteson, et al.) was a good count.

**Wood Stork:** A few of the higher counts on CBCs in South Carolina were 82 on the Lowcountry CBC, 17 Dec (fide Ken Scott); 90 on the Winyah Bay CBC, 18 Dec (fide Lex Glover); and 83 on the ACE Basin CBC, 28 Dec (David Chamberlain). One on the mainland near Holden Beach, Brunswick Co, NC, 14 Jan (Debbie Kirby) was unusual for NC during the mid-winter.

Great Cormorant: Sightings from NC included an immature bird on a channel marker at Beaufort Inlet, Carteret Co, 5 Dec (John Fussell) through 21 Dec (Louis Teer); three around New River Inlet, Onslow Co, during the Camp Lejeune CBC, 18 Dec (fide John DeLuca); five at Masonboro Inlet, New Hanover Co, during the Wilmington CBC, 3 Jan (fide Sam Cooper); six adults on the jetty at Cape Lookout, Carteret Co, 17 Jan (Fussell, Keith Rittmaster, Josh Summers); two at the south end of Oregon Inlet, Dare Co, 19 Jan (Sherry Lane); and six at Masonboro Inlet, 21 Feb (Lucas Bobay). An immature bird at Twin Lakes in Sunset Beach, Brunswick Co, 14 Feb (Taylor Piephoff) was unusual for that freshwater site. In SC, an adult was seen perched on a buoy off Ft Moultrie NM, Charleston Co, 28 Dec (Hilda Flamholtz) through 3 Jan (Pam Ford).

**Anhinga:** Two seen at a pond along Grapevine Rd in Halifax Co, NC, during the Roanoke Rapids CBC, 3 Jan (Ken Oeser) were unusual for that area in winter. 212 on the Hilton Head Island CBC, 15 Dec (fide Kathy Greider) was a record number for that count.

American White Pelican: Some of the higher counts were 312 at Donnelly WMA, Colleton Co, SC, 12 Dec (David McLean); 206 in Georgetown Co, SC, during the Winyah Bay CBC, 18 Dec (fide Lex Glover); 35 on North Pond, Pea Island NWR, Dare Co, NC, 10 Jan (Lynn Erla Beegle); and 45 at Congaree NP, Richland Co, SC, 1 Feb (John Grego). One on John D. Long Lake in Union Co, SC, 26 Dec (Richard Gregory) was unusual.

**Brown Pelican:** Rare away from the ocean, a Brown Pelican was seen soaring over the Scuppernong River in Columbia, Tyrrell Co, NC, 1 Feb (Ricky Davis) and, probably the same individual, at a pond along US-64, a few miles west of Columbia, 28 Feb (Davis).

**Reddish Egret:** One found in Beaufort Co, SC, during the Lowcountry CBC, 17 Dec (fide Ken Scott) was unusual for the winter season.

Cattle Egret: Scarce in winter, a Cattle Egret was seen in Carteret Co, NC, during the Morehead City CBC, 14 Dec (Nate Bacheler); 12 were seen on the Mattamuskeet NWR CBC, 29 Dec (fide Susan Campbell); and six were seen along Laurel Hill Wildlife Dr at Savannah NWR, Jasper Co, SC, 24 Jan (Eric Haskell, Lois Stacey, et al.).

Green Heron: In NC, lingering individuals were found on the Central Beaufort County CBC, 14 Dec (fide Kevin O'Kane); on the Holly Shelter & Lea-Hutaff Island CBC, 14 Dec (fide Carson Wood); on the Cumberland County CBC, 18 Dec (Brian Bockhahn); on the Rocky Mount CBC, 19 Dec (Bockhahn); in Wake Co, 28 Dec (Ryan Justice); on the Pettigrew SP CBC, 30 Dec (fide Doug LeQuire); on the Southport-Bald Head-Oak Islands CBC, 4 Jan (fide Ron Clark); and in the Roanoke Island Marshes, Dare Co, 30 Jan (Steve Ritt). One found in Greenville Co, SC, during the North Greenville CBC, 27 Dec (fide Donnie Coody) was very unusual for a site so far inland in winter. The highest count on a CBC along the SC coast was four on the ACE Basin CBC, 28 Dec (fide David Chamberlain).

**Yellow-crowned Night-Heron:** An adult over-wintered in Dare Co, NC again this year, seen on Pond Island, along US-64 between Roanoke Island and Whalebone Junction, 27 Dec (Edmund LeGrand) through 13 Feb (Chloe Walker).

**Glossy Ibis:** 77 on the Winyah Bay CBC, 18 Dec (fide Lex Glover) and 90 on the Mattamuskeet NWR CBC, 29 Dec (fide Susan Campbell) were high totals for winter. One at Cape Point, Dare Co, NC, 4 Jan (Bobby Koch) and 30 Jan (Paul Serridge, et al.) was unusual for that site.

**White-faced Ibis:** At least one probably over-wintered in the Lake Landing area (restricted access during the winter) of Mattamuskeet NWR, Hyde Co, NC, as individuals were seen during the Mattamuskeet NWR CBC, 29 Dec (Derb Carter, Edmund LeGrand) and 18 Jan (Scott Winton).

**Roseate Spoonbill:** Eight on the Winyah Bay CBC, 18 Dec (fide Lex Glover) and seven on the ACE Basin CBC, 28 Dec (fide David Chamberlain) were great counts for the winter season and record totals for those CBCs.

**Osprey:** One at Buckhorn Reservoir, Wilson Co, NC, 7 Dec (Ricky Davis) was somewhat late for that inland location.

**Rough-legged Hawk:** One was reliably seen along Cheek Mountain Rd in Alleghany Co, NC, during the winter. First discovered during the New River CBC, 20 Dec (fide Harrol Blevins), this rare winter visitor was seen by many until last reported 7 Feb (Jesse Pope).

**Golden Eagle:** Multiple sightings were at opposite ends of NC—the northern mountains and the Albemarle Peninsula. In the northern mountains, an adult was seen in northern Watauga Co, 14 Dec (Merrill Lynch); one was seen at Carvers Gap, Mitchell Co, 18 Jan (Jacob Socolar); an adult was seen

in northern Wilkes Co, 26 Jan (Eric Harrold); two, an adult and an immature bird, were seen in the area around Cheek Mountain Rd in Alleghany Co, 31 Jan (Harrold); and an immature bird continued to be seen around Cheek Mountain through 2 Mar (Harrold, m. obs.). On the Albemarle Peninsula, individuals were seen at Alligator River NWR, Dare Co, 6 Jan (Jamie Adams, Greg Massey, Harry Sell) through 12 Feb (Jim Gould, m. obs.) and at a waterfowl impoundment along US-264 near Engelhard, Hyde Co, an immature bird, 20 Jan (Skip Hancock, Linda Ward). In SC, one was seen at Savannah NWR, Jasper Co, 6 Dec (Caroline Eastman).

**Purple Gallinule:** One seen and photographed at Lake Conway, Horry Co, SC, 3-11 Feb (Steve Thomas, et al.) was unusual for the northern SC coastal plain, especially in winter.

**Sandhill Crane:** The pair that has wintered around Beaufort, Carteret Co, NC, during the past few years, was again present throughout the period (fide John Fussell). In the Bluff Unit of Santee NWR, Clarendon Co, SC, a rather sizable flock was seen through much of the winter, with 22 found there 17 Dec (Pam Ford), a high count of 34 seen 17 Jan (Cathy Miller), and 26 remaining 23 Feb (Donald Weidemann). Three were seen at the east end of Lake Townsend, Guilford Co, NC, 9 Jan (Lou Skrabec, George Wheaton) and 17 Jan (Jamie Adams). Four were photographed in flight over the Lake Landing area (restricted access in winter) of Mattamuskeet NWR, Hyde Co, NC, 8 Feb (Scott Winton, et al.).

**Black-necked Stilt:** Individuals in Georgetown Co, SC, during the Winyah Bay CBC, 18 Dec (fide Lex Glover) and at the Savannah Spoil Site (restricted access), Jasper Co, SC, 3 Jan (Irvin Pitts) were unusual for the winter season.

American Avocet: High counts at two traditional wintering sites were 650 at the Savannah Spoil Site (restricted access), Jasper Co, SC, 18 Jan (Steve Calver) and 250 at Pea Island NWR, Dare Co, NC, 31 Jan (Paul Serridge, et al.).

American Oystercatcher: 600 in Beaufort Co, SC, during the Lowcountry CBC, 17 Dec (fide Ken Scott) was the second highest total of any 2014 Audubon CBC.

**Wilson's Plover:** Rare winter sightings included one at the Rachel Carson Reserve in Carteret Co, NC, 10 Dec (John Fussell); two at Murrells Inlet, Georgetown Co, SC, 2 Jan (Parkin Hunter); and one in Charleston Co, SC, during the Sea Islands CBC, 5 Jan (fide Aaron Given).

**Piping Plover:** 29 in Beaufort Co, SC, during the Lowcountry CBC, 17 Dec (fide Ken Scott) was a record number for that count.

**Spotted Sandpiper:** In NC, lingering individuals were seen near Core Creek, Carteret Co, 12 Dec (Jack Fennell) and 14 Dec (Ricky Davis); at Lake Crabtree, Wake Co, 1 Jan (Ed Corey); and at Pea Island NWR, Dare Co, 15 Feb (Keith Camburn, Dennis Vollmar). As expected, our region's highest winter counts were made along the southern SC coast—12 in Beaufort Co,

during the Hilton Head Island CBC, 15 Dec (fide Kathy Greider) and ten in Beaufort Co, during the Lowcountry CBC, 17 Dec (fide Ken Scott).

**Greater Yellowlegs:** One at Harris Lake, Wake Co, NC, 7 Feb (Mike Turner) was unusual for a site so far inland during the winter.

**Long-billed Curlew:** Three were seen at Key Inlet, Cape Romain NWR, Charleston Co, SC, on a trip with Coastal Expeditions, 8 Feb (Paul Serridge, et al.).

**Marbled Godwit:** 290 at the Rachel Carson Reserve, Carteret Co, NC, 10 Dec (John Fussell) and 319 in Dare Co, NC, during the Cape Hatteras CBC, 27 Dec (fide Pat Moore) were impressive counts.

**Red Knot:** A few of the better counts were 76 along the Bogue Banks in Carteret Co, NC, 3 Feb (John Fussell); 120 at Folly Beach County Park, Charleston Co, SC, 7 Feb (Paul Serridge, et al.); 60 at the base of the pier in Frisco, Dare Co, NC, 15 Feb (Keith Camburn, Dennis Vollmar); and 147 at North Topsail Beach, Onslow Co, NC, 16 Feb (Gilbert Grant). Also of interest, Fussell noticed a relative absence of Red Knots in the eastern portion of Atlantic Beach this winter. He theorizes a beach re-nourishment project last spring affected the number of *Donax* sp. clams, an important food source for knots, along that stretch of beach.

**Ruff:** A white-necked variant adult was seen and photographed at Bear Island WMA, Colleton Co, SC, 16 Feb (Brian & Jacquie Penney) through 21 Feb (Caroline Eastman). Amazingly, this individual makes the third Ruff found at Bear Island WMA within the span of a year!



Red Phalarope, 08 February 2015, Pee Dee NWR, Anson Co, NC.
Photo by Martina Nordstrand.

**Wilson's Snipe:** 100 at North River Marsh, Carteret Co, NC, 3 Dec (John Fussell) and 100 at Mattamuskeet NWR, Hyde Co, NC, 31 Jan (Lewis Burke) were good counts.

**Red Phalarope:** 350+ on a pelagic trip out of Hatteras, Dare Co, NC, 7 Feb (Brian Patteson, et al.) was a good count. One photographed at Pee Dee NWR, Anson Co, NC, 18 Feb (Matthew Janson, Martina Nordstrand, Will Stuart) was an excellent find and a county first. In fact, this sighting was especially unusual considering there are only two previous records of this species at an inland site in NC during the winter season. One photographed in Ocracoke, Hyde Co, NC, 28 Feb (Peter Vankevich) was also noteworthy.

**Great Skua:** On pelagic trips out of Hatteras, Dare Co, NC, two were seen 17 Jan, and one was seen 16 Feb (Brian Patteson, et al.). One photographed in a tidal pool on the beach at Cape Point, Dare Co, NC, 26 Feb (Bobby Koch) was a remarkable find—it was the first Great Skua documented on land, not the open ocean, in the Carolinas.

Parasitic Jaeger: 13 on the Southport-Bald Head-Oak Islands CBC, 4 Jan (fide Ron Clark) was a record number for that count and the highest total of any 2014 Audubon CBC. Other "from-shore" sightings included one off Ft Macon, Carteret Co, NC, 13 Dec (Ricky Davis); one off Pine Knoll Shores, Carteret Co, during the Morehead City CBC, 14 Dec (Gilbert Grant); one off Coquina Beach, Dare Co, NC, 28 Dec (Davis); one off North Litchfield Beach, Georgetown Co, SC, during the Litchfield-Pawleys Island CBC, 30 Dec (fide Chris Hill); two off Murrells Inlet, Georgetown Co, 2 Jan (Peter



Great Skua, 26 February 2015, Dare Co, NC. Photo by Bobby Koch.

Stangel); two off Pea Island NWR, Dare Co, 4 Jan (Ryan Justice); and one off of Jennette's Pier, Dare Co, 30 Jan (Davis).

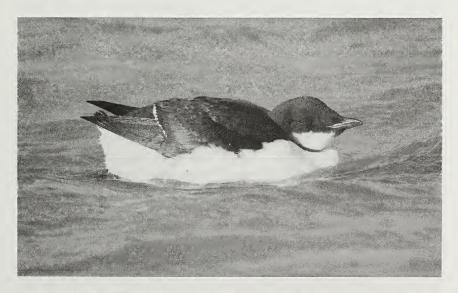
**Dovekie:** Counts on pelagic trips out of Hatteras, Dare Co, NC, included 101 on 7 Feb, 161 on 14 Feb, and 107 on 16 Feb (Brian Patteson, et al.). Seven in flight off of Jennette's Pier, Dare Co, NC, 31 Jan (Ricky Davis) was the best "from-shore" count. One photographed alongside Johnnie Mercer's Pier in Wrightsville Beach, New Hanover Co, NC, 29 Jan (Jamie Adams) was the southernmost sighting reported.

**Thick-billed Murre:** Individuals photographed at Mason Inlet, New Hanover Co, NC, 17 Jan (Lucas Bobay, Sam Jolly, Paul Tallie) and at Oregon Inlet, Dare Co, NC, 7 Feb (Jim Elder, Daryl Owens, David Youker, et al.) appeared injured, while one, molting into breeding plumage, photographed alongside the Cherry Grove Pier, Horry Co, SC, 17 Feb (Bill Bendoritis) appeared healthier.

**Razorbill:** 1,430 on a pelagic trip out of Hatteras, Dare Co, NC, 14 Feb (Brian Patteson, et al.) was our highest one-day total. 1,070 off of Jennette's Pier, Dare Co, NC, 31 Jan (Ricky Davis) provided an excellent "from-shore" count. Nine off Johnnie Mercer's Pier, New Hanover Co, NC, 31 Jan (Sam Cooper) was a good count for a site so far south.

**Atlantic Puffin:** One seen and photographed on a pelagic trip out of Hatteras, Dare Co, NC, 14 Feb (Brian Patteson, et al.) was the only one reported this winter.

Little Gull: On pelagic trips out of Hatteras, Dare Co, NC, an adult was



Thick-billed Murre, 17 January 2015, Mason Inlet, New Hanover Co, NC. Photo by Lucas Bobay.

seen 17 Jan, and at least five individuals were seen 14 Feb and 16 Feb (Brian Patteson, et al.). Birders attending the Carolina Bird Club Winter Meeting in Nags Head, Dare Co, NC, found an adult Little Gull amongst a flock of Bonaparte's Gulls off Jennette's Pier, 30 Jan (Ricky Davis, Jesse Pope, et al.).

**Laughing Gull:** One at Lake Wheeler, Wake Co, NC, 2 Dec (Mike Turner) was unusual for the Piedmont region during the winter.

**Thayer's Gull:** An adult was seen and photographed during a pelagic trip out of Hatteras, Dare Co, NC, 14 Feb (Brian Patteson, et al.).

**Iceland Gull:** At least two Iceland Gulls were seen at Mason Inlet, New Hanover Co, NC, after millions of small bait fish washed ashore in late December. After one was first reported 1 Jan (Jamie Adams), a darker first-winter bird was photographed 2 Jan (Sam Cooper) and 4 Jan (Derb Carter), and a second-winter bird was seen there 3 Jan (Carter, Jeff Pippen) through 14 Feb (Cooper). A first-winter bird was photographed at Cape Point, Dare Co, NC, 18 Jan (Thierry Besançon). A lighter first-winter bird at Wanchese Harbor, Dare Co, first reported 20 Jan (R. Bruce Richardson) was seen and photographed by many during the Carolina Bird Club Winter Meeting, 30-31 Jan (m. obs.). On pelagic trips out of Hatteras, Dare Co, NC, a first-winter bird was seen 14 Feb, and two were seen 21 Feb (Brian Patteson, et al.).

Lesser Black-backed Gull: Inland sightings included 21 in a field along NC-42 near Conetoe, Edgecombe Co, NC, 13 Dec (Ricky Davis); an adult on Lake Murray, Lexington Co, SC, 17 Dec (Irvin Pitts); three adults on Jordan Lake, Chatham Co, NC, 21 Dec (Steve Shultz); two adults on Falls Lake in Wake Co, during its CBC, 5 Jan (fide Brian Bockhahn); two adults on Lake Townsend, Guilford Co, NC, 3 Feb (Henry Link); 67 in a field near Hobgood, Halifax Co, NC, 8 Feb (Davis); and one, either an adult or a third-winter bird, on W. Kerr Scott Reservoir, Wilkes Co, NC, 22 Feb (Issac Kerns, Guy McGrane). 150 at Mason Inlet, New Hanover Co, NC, 3 Jan (Jamie Adams, Derb Carter, Jeff Pippen, et al.) was an unusually high count for that area.

"Nelson's Gull": A hybrid of Glaucous Gull and Herring Gull, individual Nelson's Gulls were seen on pelagic trips out of Hatteras, Dare Co, NC, and 17 Jan and 14 Feb (Brian Patteson, et al.)

**Glaucous Gull:** Individuals were seen at Cape Point, Dare Co, NC, 24 Dec (Frederic Hareau); at Ft Caswell, Brunswick Co, NC, 4 Jan (Ron Clark); and at Rich Inlet, New Hanover Co, NC, a first-winter bird, 25 Jan (Derb Carter).

**Sandwich Tern:** Two in Georgetown Co, SC, during the Winyah Bay CBC, 18 Dec (fide Lex Glover) and three at the Savannah Spoil Site (restricted access), Jasper Co, SC, 3 Jan (Matthew Sarver) were good finds for the winter season.

White-winged Dove: Sightings included one along the Pitt St causeway in Mt Pleasant, Charleston Co, SC, 4 Dec (Irvin Pitts); two in Mt Pleasant, 9 Dec (Craig Watson); one in Georgetown Co, SC, during the Litchfield-

Pawleys Island CBC, 30 Dec (fide Chris Hill); one at Mattamuskeet NWR, Hyde Co, NC, 6 Feb (Lee Adams, et al.); and one visiting a feeder in Spring Lake, Harnett Co, NC, 13-25 Feb (Mike Stewart).

**Long-eared Owl:** An injured Long-eared Owl was found in a commercial area along US-76, southwest of Irmo, Lexington Co, SC, 8 Dec (fide Ron Clark). The owl was taken to the Carolina Raptor Center where it recovered and was later released.

Northern Saw-whet Owl: One that responded to an audio recording on Sauratown Mountain, Stokes Co, NC, at 1300 feet above sea level, during the Hanging Rock SP CBC, 21 Dec (Brian Bockhahn) was a first for that count. One was heard in Buxton Woods, Dare Co, NC, during the Cape Hatteras CBC, 27 Dec (Mike McCloy). After three were heard along the entrance road to the Bodie Island Lighthouse, Dare Co, NC, during the Bodie-Pea Island CBC, 28 Dec (fide Paul Sykes), high counts of five were made there 6 Jan (Jamie Adams) and 3 Feb (Sam Cooper).

Caprimulgidae species: One, either a Chuck-will's-widow or a Whippoor-will, was found lingering into winter in Beaufort Co, SC, during the Hilton Head Island CBC, 15 Dec (fide Kathy Greider).

Ruby-throated Hummingbird: Two yards at opposite ends of our coast hosted good numbers this winter—up to 15 in Buxton, Dare Co, NC (Ann Maddock) and up to 14 in Mt Pleasant, Charleston Co, SC (Lynn Fortenberry). Away from the coast, where winter sightings are rare, an adult female visited a feeder in Alexander Co, NC, just north of Hickory, 4 Nov into winter, banded 10 Jan (Dwayne Martin) and another female visited a yard in Mecklenburg Co, NC, seen on the Charlotte CBC, 27 Dec (fide Ken Kneidel).

**Black-chinned Hummingbird:** Two were seen in SC this winter. An adult male visited a feeder on James Island, Charleston Co, SC, 16 Jan (Keith McCullough) through 23 Feb (Charles Donnelly). Another adult male visited a Red Camellia bush and adjacent feeder in a yard in Lexington Co, SC, 6 Feb into spring (Edith & Marion Clark). Both hummingbirds were photographed and seen by multiple observers.

**Rufous Hummingbird:** Sightings included an adult female visiting a feeder in Hiddenite, Alexander Co, NC, 3 Nov into spring (Ron Underwood); two females visiting a feeder in Forsyth Co, NC, throughout the winter (Phil Dickinson, Ann Williams, et al.); an adult female visiting a feeder in Hickory, Catawba Co, NC, 8-19 Jan, banded 10 Jan (Dwayne Martin); an immature male visiting a feeder on Ladys Island, Beaufort Co, SC, 16 Jan through 12 Mar (Buddy Campbell); and a female at Coker Arboretum in Chapel Hill, Orange Co, NC, 4 Feb (Lucretia Kinney) into spring (m. obs.).

**Calliope Hummingbird:** An immature male visited a feeder in Charlotte, Mecklenburg Co, NC, where banded, 7 Jan (Dwayne Martin) through 7 Feb (Matthew Janson). Interestingly, a different Calliope Hummingbird, a female, visited a feeder on the other side of Charlotte last winter.



Black-chinned Hummingbird, 10 February 2015, Lexington Co, SC. Photo by Irvin Pitts.

**Crested Caracara:** Our region's first Crested Caracara was seen and photographed at, ironically, The SC Center for Birds of Prey in Awendaw, Charleston Co, SC, 17 Feb (Keith McCullough, Craig Watson, et al.). The report already has been accepted by the SC BRC. Considering the number of sightings in the northeastern United States in recent years, it's only a matter of time before a Caracara is found in North Carolina as well.

**Peregrine Falcon:** Two seen on the Reynolds American building in downtown Winston-Salem, Forsyth Co, NC, 1 Jan (Ron Morris) and 21 & 28 Feb (John Haire, et al.) may have been a bonded pair.

**Ash-throated Flycatcher:** The only one found in the Carolinas this winter was intermittently seen in the vicinity of the boat ramp at Pettigrew SP, Washington Co, NC, 9 Jan (Jamie Adams) through 1 Feb (Ron Clark, et al.).

**Western Kingbird:** Individuals were seen at Pamlico Point, Pamlico Co, NC, 9 Dec (Cody Stone) and on Hilton Head Island, Beaufort Co, SC, 27 Dec (Timothy White). Three kingbirds were photographed at Ft Moultrie NM, Charleston Co, SC, 5 Jan (Cherrie Sneed). Interestingly, three Western Kingbirds were seen at nearby Patriot's Point last winter—were these three birds the same three individuals?

**Blue-headed Vireo:** As expected, the highest counts were made along our southern coast, with 23 on the ACE Basin CBC, 28 Dec (fide David Chamberlain); 23 on the Litchfield-Pawleys Island CBC, 30 Dec (fide Chris Hill); and 22 on the Sea Islands CBC, 5 Jan (fide Aaron Given). 23 on the Cape Hatteras CBC, 27 Dec (fide Pat Moore) was NC's high count.

**Tree Swallow:** 20,000+ at North River Farms (limited access), Carteret Co, NC, 25 Jan (John Fussell, et al.) was an impressive count. Fussell noted

that numbers at that site increased throughout January, but then drastically decreased in February.

**Barn Swallow:** Quite late were individuals at Mattamuskeet NWR, Hyde Co, NC, 25 Dec (Frederic Hareau) and at Huntington Beach SP, Georgetown Co, SC, during the Litchfield-Pawleys Island CBC, 30 Dec (fide Chris Hill) and 16 Jan (Irvin Pitts).

**Blue-gray Gnatcatcher:** Farther inland than is typical in winter were two at Rankin Lake, Gaston Co, NC, 2 Dec (Steve Tracy); one at Jordan Lake, Chatham Co, NC, 2 Dec (Tom Snow); one on the Durham CBC, 14 Dec (fide Jeff Pippen); one on the Clemson CBC, 20 Dec (fide Drew Lanham); one on the Gastonia CBC, 20 Dec (fide Tracy); one on the Charlotte CBC, 27 Dec (fide Ken Kneidel); one photographed at Miller Park, Forsyth Co, NC, during the Winston-Salem CBC, 3 Jan (Heather Moir, et al.); and one on the Jordan Lake CBC, 4 Jan (Barbara Coffman, et al.).

**Lapland Longspur:** Individuals were seen at Camp Lejeune Marine Corps Base (restricted access), Onslow Co, NC, during the Camp Lejeune CBC, 18 Dec (John Fussell); with Snow Buntings at Cape Point, Dare Co, NC, 24 Dec (Frederic Hareau), and by many through 28 Feb (Phil Cumming); and with a flock of Horned Larks in a harvested corn field in Cleveland Co, NC, 15 Jan (Simon Thompson, et al.).

**Snow Bunting:** Up to five Snow Buntings were seen at Cape Point, Dare Co, NC, 24 Dec (Frederic Hareau) through the end of the period (m. obs.).

**Ovenbird:** Winter sightings included two on the Sun City-Okatie CBC, 14 Dec (fide Jim Cubie); three in Dare Co, NC, during the Cape Hatteras CBC, 27 Dec (fide Pat Moore); one at Caw Caw Interpretive Center, Charleston Co, SC, 15 Jan (Keith McCullough); and one on Roanoke Island, Dare Co, in January and February (Jeff Lewis).

**Louisiana Waterthrush:** One photographed at Donnelly WMA, Colleton Co, SC, 21 Feb (Brian & Jacquie Penney) was early.

**Northern Waterthrush:** One lingered or over-wintered at Savannah NWR, Jasper Co, SC, seen 8 Dec (Mary Lou Dickson) and 3 Jan (Steve Holzman).

**Black-and-white Warbler:** As expected, the highest winter counts were made along our southern coast, with 16 on the Congaree Swamp CBC, 14 Dec (fide John Grego) and 18 on the Santee NWR CBC, 20 Dec (fide Dennis Forsythe). Nine around Florence, SC, during the Pee Dee Area CBC, 14 Dec (fide Shawn Smolen-Morton) was an impressive count for that area. Farther inland, individuals were found in Huntersville, Mecklenburg Co, NC, during the Southern Lake Norman CBC, 14 Dec (Jeff Lemons); in Orange Co, NC, during the Chapel Hill CBC, 21 Dec (Robert Howes); on the Charlotte CBC, 27 Dec (fide Ken Kneidel); and in a yard in Durham Co, NC, 8 Jan (John McVay).

Cape May Warbler: A first-winter female visited feeders in a yard in



Northern Parula, 17 February 2015, Moore Co, NC. Photo by Linda Jones.

Northern Parula: A rare-but-regular over-winterer along our coast, individual Northern Parulas were seen at Alligator River NWR, Dare Co, NC, during its CBC, 30 Dec (Lee Adams); in Georgetown Co, SC, during the Winyah Bay CBC, 18 Dec (fide Lex Glover); and in the Fairfield Harbor neighborhood in Craven Co, NC, 1 Jan (Matt Gould). One that visited a feeder in Vass, Moore Co, NC, where photographed, 17 Jan through 27 Feb (Linda Jones) was especially interesting for that inland location.

**Yellow Warbler:** One was photographed along the causeway at Mattamuskeet NWR, Hyde Co, NC, during its CBC, 29 Dec (Jeff Lemons).

**Chestnut-sided Warbler:** A first-winter bird photographed along McGhee Rd in Chatham Co, NC, during the Chapel Hill CBC, 21 Dec (Andrew Thornton) was incredible. There are no previous winter records of this species in the Carolinas.

**Black-throated Blue Warbler:** Individuals lingered at White Deer Park in Garner, Wake Co, NC, 7 Dec (Clyde Sorenson); in the Cuddo Unit of Santee NWR, Clarendon Co, SC, 14 Dec (Katie Rittenhouse) and at a feeder in Dare Co, NC, photographed, on the Kitty Hawk CBC, 20 Dec (Alan McEachren).

**Yellow-throated Warbler:** In NC, individuals were seen on the Wilmington CBC, 3 Jan (fide Sam Cooper) and visiting a feeder near Belville, Brunswick Co, in February (Greg Massey). One wintered in a yard in Meggett, Charleston Co, SC, for a fifth straight year (Cherrie Sneed). SC's high count this winter was nine in Beaufort Co, during the Hilton Head Island CBC, 15 Dec (fide Kathy Greider).

**Prairie Warbler:** Individuals were seen in Dare Co, NC, during the Cape Hatteras CBC, 27 Dec (fide Pat Moore); at Ft Fisher, New Hanover Co, NC,



Chestnut-sided Warbler, 21 December 2014, Chatham Co, NC. Photo by Andrew Thorn.

27 Dec (Ryan Justice) through 4 Jan (fide Ron Clark); at Huntington Beach SP, Georgetown Co, SC, during the Litchfield-Pawleys Island CBC, 30 Dec (Stephen Thomas); on the Wilmington CBC, 3 Jan (fide Sam Cooper); and at the Bodie Island Lighthouse pond, Dare Co, 31 Jan (Kent Fiala, et al.). Counts of two were made in Georgetown Co, during the Winyah Bay CBC, 18 Dec (fide Lex Glover) and in Charleston Co, SC, during the Sea Islands CBC, 5 Jan (fide Aaron Given).

Yellow-breasted Chat: Individuals were seen in a yard in Jacksonville, Onslow Co, NC, throughout the winter (Gunter Richter); at Mackay Island NWR, Currituck Co, NC, 3 Jan (Ryan Justice, et al.); and visiting a feeder in Stumpy Point, Dare Co, NC, from early January through the end of the period (Jeff Lewis). Two at Palmetto Island County Park, Charleston Co, SC, 8 Jan (Chet Morse) was remarkable because most sightings made in winter are of individuals.

**Bachman's Sparrow:** Winter sightings included two on the Southern Pines CBC, 14 Dec (fide Susan Campbell); twelve on the Camp Lejeune CBC, 18 Dec (fide John DeLuca); four on the ACE Basin CBC, 28 Dec (fide David Chamberlain); and two at Santee Coastal Reserve, Charleston Co, SC, 9 Feb (Steve Compton, Paul Serridge).

**Clay-colored Sparrow:** Strangely, this winter's sightings were all made at the same site, North River Farms (limited access), Carteret Co, NC, where the species was present from 25 Jan into spring, with a peak count of 17 sparrows on 15 Feb (John Fussell, et al.).

**Vesper Sparrow:** The high count for the period was 16 at Dobbins Farm in Townville, Anderson Co, SC, 24 Feb (Scott Davis).

Lark Sparrow: The only one found on any CBC in the Carolinas this

winter was an adult bird along Ambrose Rd in Washington Co, NC, during the Pettigrew SP CBC, 30 Dec (Ed Corey). Away from CBCs, individuals were also noted in Elloree, Orangeburg Co, SC, 8 Dec (Donna & Harold Donnelly) and in Jarvisburg, Currituck Co, NC, 31 Dec (David Clark).

**Grasshopper Sparrow:** Winter sightings included one in a Longleaf Pine regeneration area at Congaree Bluff Heritage Preserve, Calhoun Co, SC, 3 Dec (Irvin Pitts); one just east of Congaree Bluffs, during the Congaree Swamp CBC, 14 Dec (Cathy Miller); two at Carolina Sandhills NWR, Chesterfield Co, SC, during its CBC, 14 Dec (Pitts); two in Barnwell Co, SC, during the Savannah River Site CBC, 18 Dec (Mark Vukovich); and two in a recently-plowed field in Meggett, Charleston Co, SC, 9 Jan (Cherrie Sneed).

**Henslow's Sparrow:** From the Spring 2014 period, a Henslow's Sparrow mist-netted, photographed, then released during a research study of Bachman's Sparrows in Cumberland Co, near its border with Hoke Co, NC, 10 Apr (Alexander Fish) was unusual for that area.

Le Conte's Sparrow: Sightings included one at the PotashCorp Wetland Mitigation Site in southern Beaufort Co, NC, 14 Dec (Lucas Bobay, Sam Jolly, Ed Landi); one in Georgetown Co, SC, during the Winyah Bay CBC, 18 Dec (fide Lex Glover); two on the Santee NWR CBC, 20 Dec (fide Dennis Forsythe); one on the Greenville CBC, 3 Jan (fide Veronica Pantelidis); five at the Savannah Spoil Site (restricted access), Jasper Co, SC, 3 Jan (Matthew Sarver); and one at North River Farms (limited access), Carteret Co, NC, 25 Jan (Jamie Adams, et al.) and 22 Feb (John Fussell, et al.).

Lincoln's Sparrow: Sightings included one in a field along NC-111 near Tarboro, Edgecombe Co, NC, 13 Dec (Ricky Davis); one in southeast Richland Co, SC, during the Congaree Swamp CBC, 14 Dec (Caroline Eastman); three in a grassy clear-cut in southern Craven Co, NC, during the New Bern CBC, 15 Dec (John Fussell, John Voigt); two on the Chapel Hill CBC, 21 Dec (fide Will Cook); three at Mattamuskeet NWR, Hyde Co, NC, during its CBC, 29 Dec (Harry LeGrand, John Wright); one on the Brevard CBC, 29 Dec (fide Jerry Griggs); and two at Congaree NP, Richland Co, SC, 12 Feb (Eastman).

**Summer Tanager:** An adult male was photographed at a feeder in Beaufort Co, SC, during the Hilton Head Island CBC, 15 Dec (fide Kathy Greider). A female visited a feeder near Belville, Brunswick Co, NC, intermittently throughout the winter (Greg Massey).

**Scarlet Tanager:** Perhaps the most curious find on any CBC in the Carolinas this year was that of a female Scarlet Tanager at the Maggie Valley Club & Resort golf course in Haywood Co, NC, during the Balsam CBC, 2 Jan (Lori & Tim Lewis, Connie & Stan Wulkowicz). The tanager was seen foraging in dogwood trees with robins, but unfortunately not photographed. There are only a handful of previous winter records, and none of those are from the mountain region.

Western Tanager: Four were reported in NC during the period—a male



Painted Bunting, 06 February 2015, Mecklenburg Co, NC. Photo by Leigh Anne Carter.

seen and photographed eating dogwood berries around the Catawba River Area office at Lake James SP, McDowell Co, 3 Dec (Jamie Cameron, et al.) through 8 Jan (Ed Corey); a female photographed at the Currituck Beach Lighthouse, Currituck Co, 26 Dec (Greg Hudson); a male visiting a feeder in Morehead City, Carteret Co, 1 Jan (Jane & Maury Wolff, et al.) through 24 Feb (Chandra Biggerstaff, John Fussell, et al.); and a male photographed at a feeder in Wilmington, New Hanover Co, 17 Feb (Bruce Smithson).

**Indigo Bunting:** Rare in winter, a male Indigo Bunting visited a millet feeder near Merrimon, Carteret Co, NC, where photographed, 15 Feb into early March (Holly Powell).

**Painted Bunting:** Winter sightings included a female-plumaged bird at a feeder in Pawleys Island, Georgetown Co, SC, during the Litchfield-Pawleys Island CBC, 30 Dec (fide Chris Hill); two on the Southport-Bald Head-Oak Islands CBC, 4 Jan (fide Ron Clark); an immature bird at a feeder on James Island, Charleston Co, SC, 6 Feb (Dennis Forsythe); a female-plumaged bird at a feeder in Kill Devil Hills, Dare Co, NC, where photographed, from early February through 29 Mar (Jim Gould); a female-plumaged bird photographed at a feeder in Charlotte, Mecklenburg Co, NC, 6 Feb (Leigh Anne Carter); and three female-plumaged birds at a feeder in Myrtle Beach, Horry Co, SC, 6 Feb into spring (Dick & Dorothy Rosche).

**Dickcissel:** One, either a female or first-winter male, intermittently visited a feeder near Aynor, Horry Co, SC, where photographed, 22 Dec through 17 Feb (Steve Thomas).

**Rusty Blackbird:** The high count at Lake Conestee Nature Park in Greenville Co, SC, was 258 birds on 31 Jan (Jane Kramer).

**Brewer's Blackbird:** Western SC, the best area of the Carolinas to find this species, produced counts of 23 on the Clemson CBC, 20 Dec (fide Drew Lanham); 22 at Dobbins Farm in Townville, Anderson Co, 27 Dec (Scott Davis); and 30 at Dobbins Farm, 16 Jan (Stephen Schutt). Eight at Santee NWR, Clarendon Co, SC, during its CBC, 20 Dec (John Grego) were good finds. In NC, one was seen on the Southport-Bald Head-Oak Islands CBC, 4 Jan (fide Ron Clark) and a male was photographed near the grain silos at Open Grounds Farm (limited access), Carteret Co, 4 Feb (Chandra Biggerstaff, Jack Fennell, John Fussell).

**Hooded Oriole:** Pending review by the NC BRC was the report of an immature male Hooded Oriole at a feeder in Charlotte, Mecklenburg Co, NC, where photographed, 6 Feb (John Brammer). There are no previous records of this species from the southwestern United States in the Carolinas.

**Bullock's Oriole:** A first-year male visited a feeder just north of Ravenel, Charleston Co, SC, where photographed, 7 Feb (Deborah Nelson) through 19 Feb (Aaron Given).

**Purple Finch:** Although there wasn't a major irruption of this northern finch this winter, sightings were made across the region. Some of the higher counts were 55 in Chesterfield Co, SC, during the Carolina Sandhills NWR CBC, 14 Dec (fide Nancy Jordan); 52 in Yancey Co, NC, during its CBC, 27 Dec (fide Bob Repoley); and 60 at the Savannah River Site (restricted access), Barnwell Co, SC, 28 Jan (Mark Vukovich).

**White-winged Crossbill:** From the Winter 2012-2013 period, a female White-winged Crossbill visited a feeder in Chapel Hill, Orange Co, NC, where photographed, 16-18 Feb 2013 (Bill Bracey). There are only a handful of records from the NC Piedmont.

**Common Redpoll:** Two redpolls visited a feeder in Kill Devil Hills, Dare Co, NC, where photographed, 14 Jan (fide Jeff Lewis), and one remained through at least 19 Jan (m. obs.). Individuals also visited feeders in Linville, Avery Co, NC, where photographed, 17-18 Feb (Jesse Pope) and in Southern Shores, Dare Co, 22 Feb through 16 Mar (Alan McEachren).

**Pine Siskin:** Siskins began irrupting into our region in December, but didn't start visiting feeders in large numbers until a period of severe cold in mid-February. Siskins were found on most of our CBCs, including our southernmost counts, with 37 on the Sun City-Okatie CBC, 14 Dec (fide Jim Cubie) providing a record number for that count. Counts from feeders included 198 near Williamston, Anderson Co, SC, 14 Feb (Eugene Hayes); 155 in northern Wake Co, NC, 15 Feb (Brian Pendergraft); 275 near Franklin, Macon Co, NC, 16 Feb (Tricia Mack); and 75 in Gastonia, Gaston Co, NC, 19 Feb (Keith Camburn).

# CAROLINA BIRD CLUB

www.carolinabirdclub.org

The Carolina Bird Club is a non-profit organization which represents and supports the birding community in the Carolinas through its official website, publications, meetings, workshops, trips, and partnerships, whose mission is

- To promote the observation, enjoyment, and study of birds.
- To provide opportunities for birders to become acquainted, and to share information and experience.
- To maintain well-documented records of birds in the Carolinas.
- To support the protection and conservation of birds and their habitats and foster an
  appreciation and respect of natural resources.
- To promote educational opportunities in bird and nature study.
- To support research on birds of the Carolinas and their habitats.

Membership is open to all persons interested in the conservation, natural history, and study of wildlife with particular emphasis on birds. Dues, contributions, and bequests to the Club may be deductible from state and federal income and estate taxes. Make checks payable to Carolina Bird Club, Inc. Send checks or correspondence regarding membership or change of address to Headquarters Secretary, or visit: http://www.carolinabirdclub.org/about.html. Dues include \$6 for subscription to the CBC Newsletter and \$7 for subscription to The Chat.

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Individual or non-profit	\$25.00
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Patron	
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Life Membership (payable in four consecutive \$125 installments).	\$500.00
Associate Life Membership (in same household as life member)	

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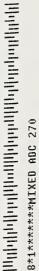
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